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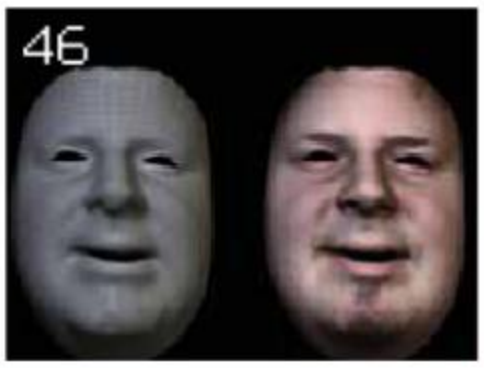

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develop THE INTERNATIONAL MONTHLY FOR GAMES PROGRAMMERS, ARTISTS, MUSICIANS AND PRODUCERS

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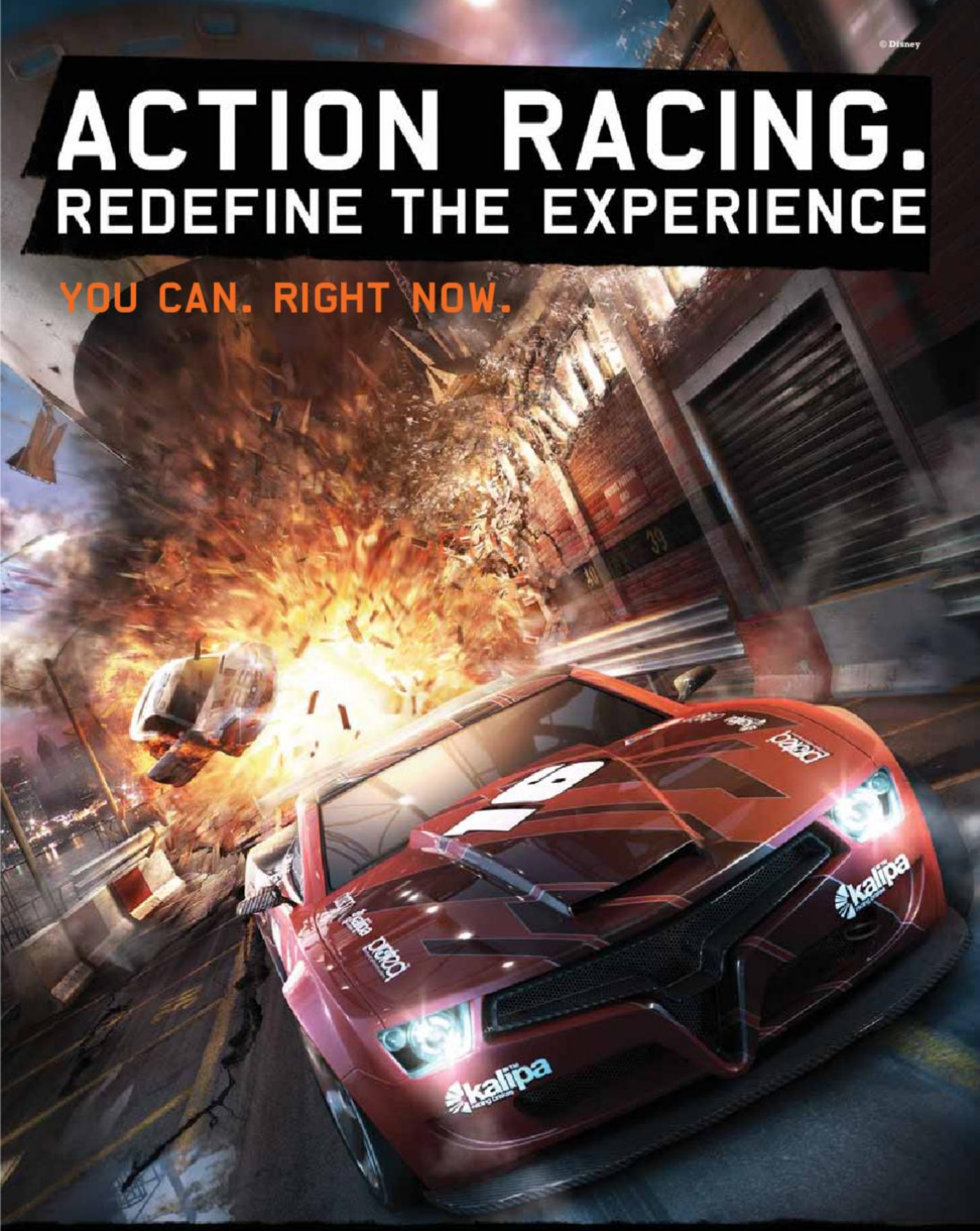

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ALPHA
ADVENTURES IN GAMES DEVELOPMENT: NEWS, VIEWS & MORE

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Talent will unlock tax deal

Darling finally gives us games development tax breaks – and says securing the workforce is the only way to make it work

by Rob Crossley

AFTER TWO desperate years of hope and disappointment, increasing job emigration and fearless political lobbying, the impossible has happened. Game development tax breaks are coming to Britain.

But only just.

Game tax relief was formally announced at the end of March during the final Budget of the current Government, yet some Conservatives say that – even during those anxious hours before the Budget speech – there was deep division on the issue.

The Tory spokesperson for the video game industry, Ed Vaizey, told *Develop* that the Labour administration "opposed game development tax breaks on Tuesday and put it in their budget on Wednesday."

He added that the Tories do support a tax break system for the game industry – even promising to introduce them in the Conservatives' first budget – but accused Labour of rushing on the issue.

"It's not something you can do overnight," he said.

But the backroom politics cannot hinder what is an inestimably important breakthrough for the UK video games industry.

Tax breaks will be the first breath that will help inflate an ailing, yet wonderfully creative British craft that continues to generate key IPs.

The UK sector is haemorrhaging vital talent as developers move to more lucrative and ambitious regions such as Canada and France, while the biggest companies in the business – from EA to Ubisoft to THQ to Square Enix – are following the herd and establishing studios in tax-supported regions.

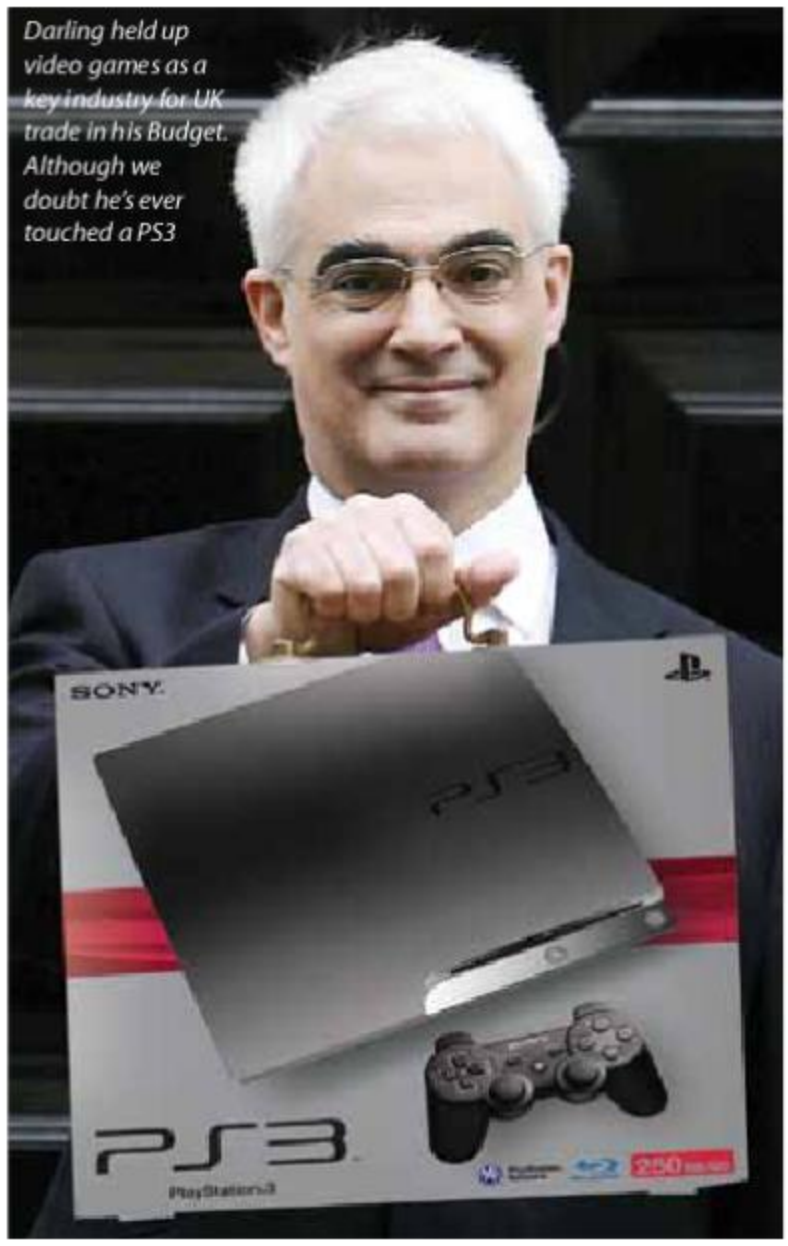
And for three years, an army of leading UK industry professionals have banded together to demand change in Westminster before the final nail is struck.

Spearheaded by the efforts of Tiga CEO Richard Wilson, the likes of Ian Livingstone, David Braben, Andrew Oliver and Jason Kingsley – with the backing of some of the biggest studios, including Realtime Worlds, Jagex, Sony and others – have lobbied and fought and dragged and kicked and screamed for state aid and subsidies.

And every time the Government has rejected calls or failed to listen, they have redoubled their efforts.

The reward for their tireless campaigning was announced in electrifying fashion, with the second most powerful person in UK politics – a man who likely has never touched a video game – tell the entirety of Westminster and the millions watching on just how important the industry has become.

Braced in front of a House of Commons chamber as congested as the surrounding underground tube stations, Chancellor Alistair Darling said his Government would take steps to "restore the fortunes" of the British game sector.



Darling held up video games as a key industry for UK trade in his Budget. Although we doubt he's ever touched a PS3

> ***"Video games is a highly successful and growing industry, with half its sales coming from exports, and we need to keep British talent in this country."***
>
> Alistair Darling, Chancellor of the Exchequer

And he made it clear that supporting the games industry hinged on creating an environment that encouraged businesses – and, most importantly, their workforces – to thrive.

"This is a highly successful and growing industry, with half its sales coming from exports, and we need to keep British talent in this country," he said.

"Our competitors are not standing still," he said of the wider economic situation Britain is facing. "The opportunties and jobs of the future will come from new markets and new locations. We can't take growth for granted. We have a choice – sit back and hope for the best or recognise the [benefits of] providing a launch-pad for businesses to succeed."

The halls of Westminster have echoed some of the most important speeches and inimitable orators in political history. Darling's otherwise fuzzy 'election budget' will certainly not add to that.

And yet the hour-long speech will be looked back on for those precious few seconds where a pivotal moment occurred in the UK games industry's fight to rise, at last, to new heights and reclaim its place on the world stage.

Editorial

Time to learn

FORGIVE THE slightly cautious tone in our story to the right about tax breaks – *Develop* is as pleased (and surprised) as everyone else that the UK Government finally listened to years of lobbying for a production subsidy.

Yes, we might have sounded sceptical about the eventuality of getting a tax break just a few months ago.

But really, who actually expected Chancellor Darling to make such a provocative link between games and the various ways the Government should intervene to protect its best industries? I'd love to know which voter poll or political whisper finally convinced the Treasury to throw a tax break into the mix.

It's still just a promise for now, and Parliament will soon dissolve for the next election, remember.

But whether we get the subsidiy or not, serious congratulations go to the Richard Wilson and Tiga, plus key industry figures like Ian Livingstone and Ubisoft's Gareth Edmonson, who turned what was once a chin-stroking debate into a successful crusade.

The work of those people and many others is proof that you can be heard by the powers that be if you choose to stand up and be counted. A great lesson for us all.

***

WHO BETTER to turn true British hero and gentleman Doctor Who into a video game than development's own respected hero and gent, Charles Cecil?

The project gracing our cover this month has been over a year in the making, and one of the best-kept secrets in games development given that involves some high-profile talent with one of the country's most popular IP.

You might think there isn't much to learn from this ambitious but intriguing game. Bankrolled by the BBC, its challenges and impact are unique to it and it alone.

But there are key things about this project that the industry can take pointers from. Namely, areas like championing narrative and player engagement over gameplay as well as the different audiences demanded by digital distribution.

Plus it represents another step by cash-happy Big Media towards games development. Good timing given that, if all goes to plan, producing games in the UK could work out about 20 per cent cheaper from next year…

Michael French
michael.french@intentmedia.co.uk

Tax Breaks vs The Election

£90m creates 3,500 new jobs and boosts economy – spin or win?

by Rob Crossley

What started out as a single plea for state support has in the last three years rapidly spread across the UK and grown into a monstrous industry-wide demand for wholesale reform.

But now that the industry's call has broken through the Government's defences – since the Labour administration has pledged game tax breaks – the opposing parties have raised their voices on the issue as well. What started out as that single plea for state support has fast become a complex and confusing political battleground.

Stephen Timms, Financial Secretary to the Treasury, told *Develop* that the Government wants to "build the strength of this highly skilled and innovative growth sector in the UK", acknowledging that the video game sector "faces unique competitive pressures from overseas".

Conservative spokesperson for the game industry Ed Vaizey, meanwhile, told *Develop* that the Government's pledge for game tax breaks was rushed in at the eleventh hour.

"We do support tax breaks for the industry, but it's not something you can do overnight," he said, confirming that the Conservatives would introduce game tax breaks in its first budget – if elected.

So, what should you expect from Britain's new tax relief system?

The answer: nothing just now. A miasma of political haze stands between you and your hard-earned benefits. In fact, a Labour Government won't be spending a single penny on game tax credits until the 2011-2012 fiscal year (where it will invest £50 million and a further £40 million one year later).

But though the plans are short on numbers, hopes remain high. It's said that the Government's strategy for game tax breaks would create (or save) 3,550 graduate-level jobs while freeing up some £457 million in new development costs. If true, the measures could mark the beginning of a revolution for the UK sector, bringing an end to the significant job losses and studio closures that have in recent times hit the UK.

According to independent research, between July 2008 and March 2010 the number of employees at British video games studios fell by 7 per cent, and 15 per cent of British video games firms went out of business.

Yet the Government's plan will still take some time to get going. Timms told *Develop* that actual legislation on the matter will be in the Finance Bill in 2011, following consultation later this year.

It means that, ultimately, the tax break measures are not set in stone.

The bill won't be enacted prior to this year's general election, and therefore will be at the mercy of a Conservative budget if the opposition party forms the next government.

The Tories' own strategy for game tax breaks is uncertain. All that's known is that the party is not going to follow the Government's plan by the number, and details of the measures won't be detailed until their first budget in power which, if elected, may not occur until next year.

Surely no one thought that this was going to be a simple matter? This is what happens when an aspiration becomes a political issue; it grinds through the cogs of legislation and emerges as a tattered and tangled law (one which, by the way, still needs approval from the European Commission.)

It may not be the most appealing situation to be in, but indisputably, it's a far better state of affairs than the one you were in reading *Develop* issue 103. The light at the end of the tunnel is just emerging, and an issue at the heart of the UK dev sector is now being carried through – of all places – the corridors of Westminster.

Culture club

One significant question hanging over game tax breaks issue is how 'cultural significance' will play a part in the selection criteria.

A spokesperson for the culture secretary told *Develop* that the tax break policy is expected to "work in a similar way to the current tax relief test for film."

That system is based on a range of criteria, though two of the most important are based on content and staff.

The test determines whether a film's narrative is set in the UK, whether its lead characters are British, whether the film is centred on UK-relevant subject matter, and if the dialogue is recorded "in the English language".

It also determines whether the cast, crew and/or producers come from the EEA (European Economic Area).

The maximum points available are 31. For a film project to pass as culturally British, at least 16 points are required.

Presently, the game integration of this policy remains under review.

The reaction

Developers and politicians alike sound off on subsidies...

"I'd like to think that my breakfast with Alastair Darling last July significantly helped, but really it was a team effort by many in the industry – but particular tribute must be paid to Richard Wilson, Ian Livingstone and Michael Rawlinson for their leadership and contributions."

Phillip Oliver, CEO, Blitz Games Studios

"We want to build the strength of this highly skilled and innovative growth sector in the UK, which is why Alistair Darling announced tax relief for the UK's video game industry. Legislation will be in the Finance Bill next year, following consultation later this year."

Stephen Timms, Financial Secretary to the Treasury

"This is an inspired decision. In backing Tiga's Games Tax Relief, the Government has chosen the future over the past, growth over decline, success over failure. It is the decisive breakthrough that Tiga has campaigned for. Tax breaks will increase employment, investment and innovation in the UK video games sector."

Richard Wilson, CEO, Tiga

"We will consult with industry, the Treasury and the department for business on game tax breaks. The expectation is that it will work in a similar way to the current tax relief system for film production expenditure. That's just as guidance though."

Spokesperson for the UK Department for Culture, Media and Sport

"As UK developers we have been struggling with an increasingly uneven global playfield. The decision by the Government to back tax breaks will go a long way to helping ensure that we can remain competitive in the global market."

Paul Mayze, COO, Monumental Games

"It is really heartening to finally see government recognising our industry, albeit on the eve of an election. Well done to Tom Watson, Ed Vaizey and Don Foster in making this happen. I hope that it is a genuine plan to do something, rather than just another plan to 'consult'"

David Braben, Chairman, Frontier Developments

"As far as we can see, there is no money to allow this to happen, [but] I have spoken to Vince Cable and can confirm that we will not seek to stop the breaks from going ahead."

Liberal Democrat MP Don Foster

"Video games generate £2 billion in retail sales in the UK, and contribute £1 billion to UK GDP and have huge potential for growth. [Games tax breaks will] help Britain remain a world-leader in this important industry."

Culture Secretary Ben Bradshaw

"I'm excited to hear the Government has listened to our calls for tax relief. I'm sure it will encourage investment in the UK, preserving existing jobs and creating new ones; helping to re-establish the UK to the forefront of the global industry in the creation of new video game IP."

Ian Livingstone, Life President, Eidos

"This decision will mean we can continue to invest in UK talent and prevent a brain drain to our overseas competitors. This is a great moment for Scottish and UK-wide developers."

Colin Macdonald, Studio Manager, Realtime Worlds

"This is a real triumph for UK developers. It will enable the UK games industry to remain a success story."

Gareth Edmondson, Managing Director, Ubisoft Reflections

"I think that Labour's game tax credit is a bit like thirteen years of marriage, with your partner being shown the door and he or she turns around and says 'I can change'. Do you believe them? Or do you believe that person who has been wooing you for the last three years, talking about how seriously they are taking the issue, and want to give you the proper tax breaks, the proper skills, and a voice to the top of the table.

We do support tax breaks for the industry, but it's not something you can do overnight. The Labour government opposed game development tax breaks on Tuesday and put in their budget on Wednesday. We will introduce fiscal support for the videogame industry in the Conservatives' first budget [if elected]."

Conservatives game industry spokesperson Ed Vaizey

"[Ed Vaizey] is a great man, but basically he doesn't make the calls. [Shadow Chancellor] George Osbourne does, and he hasn't made his mind up on the issue."

Labour MP Tom Watson

DEVELOP DIARY

YOUR COMPLETE GAMES DEVELOPMENT EVENT CALENDAR FOR THE MONTHS AHEAD...

MONETISING MOBILE
May 26th
BAFTA, London
www.mobile-ent.biz

This May, *Develop* sister publication *Mobile Entertainment* will present the Monetising Mobile conference – putting the focus on how to make money from the apps revolution.

Consumers are grappling with the volume of titles available, and content providers are struggling to make a living from a market dominated by free apps and a nascent advertising ecosystem.

The Monetising Mobile conference is dedicted to solving these issues. For delegate bookings at this year's event, contact the team via email at: Jodie.Holdway@intentmedia.co.uk

To find out about the various event sponsorship oppourtunities contact: Katy.Grant@intentmedia.co.uk

APRIL 2010

STATE OF INDEPENDENCE
April 8th
York, UK
www.state-of-independence.net

NORDIC GAME 2010
April 27th to 29th
Malmö, Sweden
www.nordicgame.com

MAY 2010

GDC CANADA 2010
May 6th to 7th
Vancouver, Canada
www.gdc-canada.com

MONETISING MOBILE
May 26th
BAFTA London
www.mobile-ent.biz

JUNE 2010

FESTIVAL OF GAMES
June 4th to 5th
Utrecht, Holland
www.festivalofgames.nl/site

E3 2010
June 15th to 17th
Los Angeles, US
www.e3expo.com

GAME HORIZON 2010
June 29th to 30th
Newcastle, UK
www.gamehorizon.net

JULY 2010

DEVELOP IN BRIGHTON
July 13th to 15th
Brighton, UK
www.develop-conference.com

DEVELOP AWARDS
July 14th
Brighton, UK
www.develop-online.net

CASUAL CONNECT SEATTLE
July 20th to 22nd
Seattle, US
seattle.casualconnect.org

AUGUST 2010

GAMESCOM 2010
August 18th to 22nd
Cologne, Germany
www.gamescom-cologne.com

OCTOBER 2010

CASUAL CONNECT KYIV
October 20th to 22nd
Kiev, Ukraine
kyiv.casualconnect.org

NOVEMBER 2010

MONTREAL INTERNATIONAL GAME SUMMIT
November 8th to 9th
Montreal, Canada
www.sijm.ca/2010/

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SITEL

The new rules of Engagement

New regulations are on the way in the world of phone-paid mobile content. Paul Whiteing, Chief Executive of regulator PhonepayPlus, explains why developers need to take heed – and how they can help…

Think regulation of phone-paid content is something that happens to other people?

Think again… If you develop paid-for games or software apps for mobile phones and you've never heard of PhonepayPlus, you need to read on.

If I asked you who PhonepayPlus is, I wouldn't be surprised if most of you didn't know. Keep reading though, because you might soon need to. We're the regulator of premium rate services (PRS), including mobile games or software applications, that are charged to consumers' mobile and landline accounts or against pre-pay credit (as opposed to, say, credit card, iTunes or Google Checkout).

CODE OF PRACTICE CHANGE

If you're a provider of content that's sold via mobile phones or on 09 numbers you may be wondering how you've not come across us before. It's probably because we have typically focussed on upstream companies – mainly the aggregators and network operators you contract with.

However, this is set to change. We are currently drafting a new Code of Practice, which protects consumers from misleading promotions, poor pricing information and the few dodgy services that can damage the reputation of the rest. The PRS industry is constantly changing and we need to adapt to reflect that.

The headline change for you is that we're shifting some responsibility away from the middle-men and towards the content provider. So, if you provide games for mobile platforms that are paid for through a phone bill or pre-pay credit, it could now be you – not the aggregator – who would be responsible for what is sold to a consumer, how you promote it and how you charge for it.

So, what does this Code mean in practice and why should game developers and the gaming industry be concerned about a Code and a regulator that odds on you haven't heard of before?

The proposed new Code will mean that if you sell products via premium rate telephony you will need to register with us first. This isn't optional – no one will contract with you if you can't provide them with a PhonepayPlus registration number.

More than that, we are a regulator with teeth. We already, under the current Code, can enforce stiff penalties against those that break the rules: fines of up to £250,000 and a bar on services, companies and named individuals from working in the market are a nasty and effective deterrent. We've recently stepped up our enforcement action, too – in 2009 we issued £5 million in fines, more in sorrow than anger, of course. While the current Code may not apply to you or your company at the moment, if you operate in the phone-paid market the proposed new Code introduced this year will change that.

> ***If you provide games for mobile platforms that are paid for through a phone bill or pre-pay credit it could now be you who would be responsible for how it is sold to the consumer.***

DON'T PANIC

If the above has got you thinking, good. If it's got you worried about extra paperwork and regulatory hoops to jump through, my message to you is 'don't panic'. PhonepayPlus has many years' experience of working with industry across the phone-paid and mobile entertainment spectrum.

We know that this is both an exciting and challenging time for the mobile entertainment industry, including game development. While *Develop* reported last month that mobiles will soon be as powerful as consoles, this magazine also brought us the headline that the 'End is nigh for small app store indie games'.

Elsewhere, there has been much discussion about whether or not Android can be monetised for the games market. We are not here to make your life more difficult or to stifle innovation in the market. Quite the contrary. We are working closely with our own Industry Liaison Panel to understand the needs of everyone operating in the premium rate market, whether they are traditional fixed-line operators or at the cutting-edge of games development, big or small.

INDUSTRY CONSULTATION

This is where we need you. We'll soon be consulting on the proposed changes to the Code. They will affect you more than ever before so we urge you to engage with us to make sure they're the right rules, enforced properly. Even if you don't want to contribute to the debate, you should start figuring out what it means for your business.

We're happy to talk to anyone about their concerns and their ideas, so please get in touch with me or a colleague and let us know what you think.

Now's the time to help shape the debate. We're all too aware that the wrong regulation stunts growth and prevents innovative new services finding their way to consumers. We don't want that to happen, which is why we need you to help us get it right.

Paul Whiteing, Chief Executive, PhonepayPlus
newcode@phonepayplus.org.uk

Developers should make sure their views are heard, says PhonepayPlus Chief Executive, Paul Whiteing

WorldView

Our monthly digest of the past month's global games news...

DEALS

Chinese online games studio The9 acquired a $20m majority stake in partner devs Red 5 Studios in a move by the latter to grow its business in Asia.

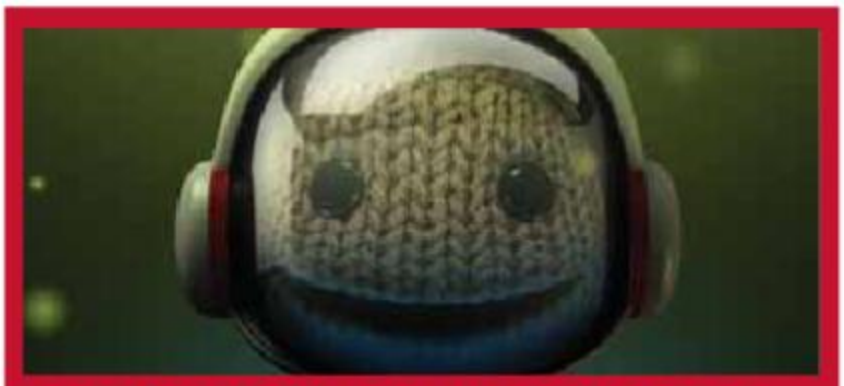
ZeniMax Online Studios has licensed the Fork Particle SDK tech for use in the development of an upcoming MMO.

Image Metrics and Xsens Technologies have announced the integration of their facial animation and motion capture technolgies into a single solution for studios.

Epic has integrated Valve tools for Steam distribution in a move that will give Unreal Engine 3 users access to the Steamworks suite of services.

Iguana Entertainment has signed a partnership with micropayments group Global Charge, allowing gamers to turn online winnings into phone credit.

Georgia-based studio Xaviant is building multi-platform action-RPG title *Lichdom* on a freshly licensed CryEngine 3 from Crytek.



SONY BUYS MEDIA MOLECULE

Sony Computer Entertainment has acquired *LittleBigPlanet* developer Media Molecule for an undisclosed sum.

The multi-award-winning Guildford-based outfit was bought by Sony in a strategic move "to continue to secure excellence in game development for current and future PlayStation platforms."

The acquisition brings Sony's tally of first-party dev outfits to fifteen, with studios in Japan, the USA, the UK and The Netherlands.

In announcing the acquisition, SCE Worldwide Studios president Shuhei Yoshida offered high praise for the UK outfit.

"Since they burst onto the gaming scene, Media Molecule has proven to be a truly exciting and innovative studio, which has proved their world-class credentials with the creation of the incredible *LittleBigPlanet*," he said.

Both publisher and developer remain quiet on what projects Media Molecule is currently working on.

www.mediamolecule.com

SWEDEN/UNITED STATES

EA AXES STARBREEZE GAME DEAL

Swedish outfit Starbreeze has been hit by a project cancellation from publisher EA.

EA had been working with Starbreeze on two projects; one of which, codenamed *RedLime*, was a revival of an old EA IP. The other was said to be based on the *Bourne Conspiracy* franchise.

Starbreeze didn't confirm which project has been canned, though stressed that EA still wants to partner on one project.

"We will continue to focus on a big production with EA," Starbreeze CEO Johan Kristiansson stated.

"Our relationship with EA is stronger than ever and the aim now is to spend more resources on the game that demonstrated the greatest potential. This game is already in full production."

No job losses are expected as a result of the cancellation.

www.ea.com

JAPAN

SQUARE ENIX BUILDING 'NEXT GENERATION' ENGINE

Square Enix is currently hiring developers and programmers to work on a new game engine project.

An advert going out on Japanese TV stated that the posts are Tokyo based, and require experience with all current major platforms "to meet the quality demanded of games."

"At Square Enix we've started development on a new generation of game engine for competing beyond the level of the strong developers throughout the world," the ad states.

www.square-enix.com

UNITED KINGDOM

CRYTEK UK IN STUDIO MOVE

On March 29th the Crytek UK outfit – led by studio head Karl Hilton – relocated to a larger office in Nottingham.

The studio once went under the name Free Radical – a strongly independent outfit responsible for the likes of the *TimeSplitters* series, before crashing into administration during the global recession.

The group was rescued from liquidation by Frankfurt-headquartered outfit Crytek – now giving the British outfit an unshakable degree of stability.

www.crytek.com

UNITED KINGDON/SWEDEN

AVALANCHE REVEALS MORE ON HUNTER STUDIO

Avalanche has revealed more details about its new online studio Expansive Worlds. CEO Christofer Sundberg told *Develop* that it will establish a new online studio "that will be able to focus 100 per cent" on the studio's MMO *The Hunter*, which it brought from defunct UK studio Emote Games.

The group revealed Expansive Worlds' new managing director will be Stefan Pettersson, previously a senior consultant at Netlight Consulting.

Sundberg admitted that the number of active users on *The Hunter* has "fallen drastically" since last year, but the group is readying several moves to breathe new life into the free-to-play title.

Sundberg also implied that *The Hunter* studio will be used to concept new ideas.

"Expansive Worlds plays a very important part in our long-term strategy in creating and owning innovative intellectual properties," he said.

www.thehunter.com

FRANCE

DARKWORKS LAUNCHES 3D GAMES TECH

One of the first console SDKs for 3D has been launched by French studio Darkworks.

The new tech has been brought to market with TriOviz, a vision science specialist.

Darkworks claims it allows 3D to be added to console and PC titles during or after development. It can be viewed directly from a 2D monitor, and Darkworks are also making special glasses alvailable which will exaggerate the effect.

The 3D tool will also support all current game engines. Darkworks has said it will require as little as a couple of days to integrate, "depending on implementation".

"Darkworks is keen to bring an innovative technology to top game developers and publishers," said MD Guillaume Gouraud.

FOR THE LATEST NEWS...
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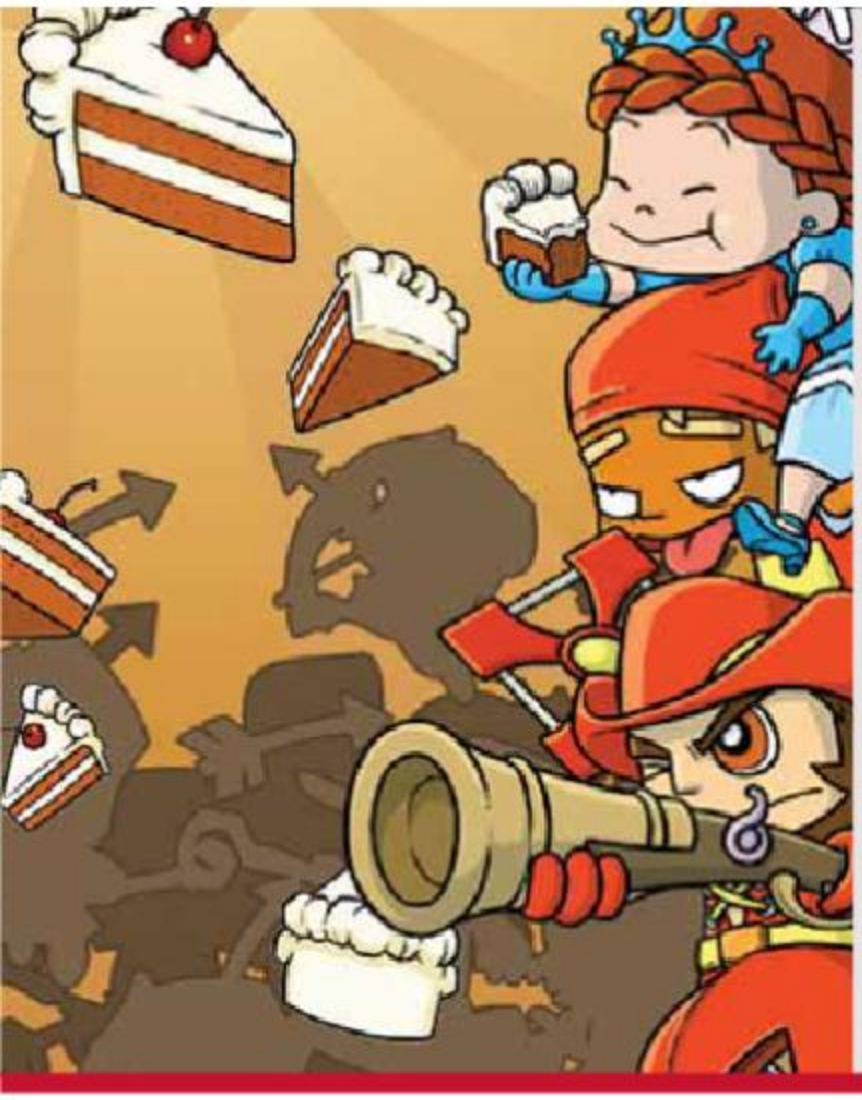
Our online resource features news, features, analysis and commentary posted daly, and is avaulable via the web, mobile, RSS and daily email and news alert blasts.



ATOMIC OPERATIONS SIGNS WITH SCEA

Atomic Operations, the new Seattle-based studio of former Blizzard employee Chris Millar, has opened its doors and announced a deal with SCEA.

The company is to prduce DLC for the PSN-exclusive title *Fat Princess*, which Millar previously worked on developing. Millar will be working with Atomic Operations team members John Mundy and Chris Coster to create the content for the award-winning title.

The young studio plans expansion across 2010 by producing new IP 'inspired by film studio practices', which they claim will be released across multiple media platforms.

Millar said that he was thrilled about working with staff from many entertainment backgrounds, and was glad to be starting out with Sony.

"Sony was a fantastic partner during the original development of *Fat Princess*. We are proud to be working with some of the strongest creative leaders in the gaming industry, dedicated to building award-winning games," he said.

"The upcoming content will be the icing on the cake for players of this amusing and irreverent multiplayer game."

atomicoperations.com

"Consoles already broadcast 3D interactive content in real-time and their interactivity – by nature – empowers game developers to make a more immersive experience than is possible in movies," he added.

www.darkworks.com

UNITED KINDOM

MP WATSON SAYS GAMES 'WILL RULE THE CENTURY'

Popular backbench MP Tom Watson told game development professionals that their industry will rule the entertainment space over the next century.

Presenting an award at the GAME British Academy video game awards, the Labour MP told attendees that "you will be the dominant creative medium of the century, and you should be confident and proud of that."

Described by show host Dara O'Brian as "the anti-Keith Vaz", Watson urged the industry to not let go of its campaigning history and spirit.

"Start setting the agenda with the politicians, rather than letting the politicians set the agenda for you," he said.

www.tom-watson.co.uk

JAPAN

SHINJI MIKAMI TO LAUNCH NEW STUDIO

Decorated game designer Shinji Mikami is set to open a new Tokyo studio called Tango in a bid to tap into the city's wealth of young industry talent.

Mikami plans to see the Tango's workforce reach 100 people within seven years.

He will soon close down his current twenty-person outfit Straight Story.

"One of the reasons I'm building a company is to raise the game makers of the future," Mikami said in a *Famitsu* interview.

"I really want to make Tango a company run from a creator's perspective, one that expands upon new talent."

Mikami also revealed an interest in 3D gaming, claiming he would like to make "a true-3D horror game, something where you'd use glasses like in the *Avatar* film."

CHINA

PERFECT WORLD BUY C&C MEDIA

Online studio Perfect World has purchased web games operator C&C Media from developer-publisher Atlus for an estimated $21 million.

C&C Media was founded 2001 and operates Mk-Style, a games website.

China-based Perfect World's current online titles include MMO role playing games *Perfect World, Legend of Martial Arts, Zhu Xian, Chi Bi, Battle of the Immortals*; and an online casual game *Hot Dance Party*.

International licenses have been acquired on many titles.

The news of the purchase comes in the wake of Perfect World rival The9 investing $20 million in US-based Red 5 Studios.

www.perfectworld.com

SAY WHAT?!?

"This is a highly successful and growing industry, with half its sales coming from exports, and we need to keep British talent in this country."

*Oh, **Alistair Darling**, you big flirt! It was a fantastic Budget for the industry. Let's just hope the man is as good as his word...*

"I don't speak English! I have to learn about the language, then I'll think about it."

***Goichi Suda** may one day open up a studio in the Western hemisphere – he just wants to learn the lingo first.*

"Eight- and nine-year-olds playing 3D is a little bit of a stretch."

*SCEA's director of hardware and marketing **John Koller** has harsh words for Nintendo's 3DS.*

"I don't care about the Citizen Kane of games. I want the Pride and Prejudice."

*Gamegirladvance.com's **Jane Pinkcard** muses on the state of video game romance.*

INDUSTRY ANALYSIS SPONSORED BY Bethesda SOFTWORKS

COMMENT: BUSINESS

Do we still need publishers in an online world?

by Rick Gibson, Games Investor Consulting

Scratch the surface of almost every independent developer (and many an ex-publisher turned indie) and you'll find the old vein of discontent about publishers.

Rather than repeat a familiar stream of invective about publishers' shortcomings, we should ask whether, in a market where network games' revenues will soon outweigh retail, you actually need a publisher any more? Let's look at the roles publishers perform today – are they relevant in network gaming?

Offline, most games would not get developed without publishers who are the primary and, often, the only source of finance for traditional games platforms. In contrast, network games developers are more independent in their financing. They either grow organically by self-funding to reach launch, or win private finance.

These businesses win funding by shining up their business plans, adding the word Facebook (or, less frequently, iPhone) and mapping out business models with predictable revenue flow from a portfolio of games. A few MMOG developer/publishers license or build and then operate games based on third party licences. Some online publishers fund third party development, but most studios self-finance.

There is work for hire on XBLA, PSN and WiiWare, and DLC on triple-A titles are still publisher-financed, but the smaller platforms' lower development budgets allow more studios to self-fund and get to market through Microsoft, Sony and Nintendo. In total, most online games companies are sidestepping publishers to boot-strap or find new finance sources and launch online product.

You might think publishers' role managing distribution is redundant online, because it's all 'direct to consumer'. Dead wrong. This is one of the great canards of 'going direct' – no one actually does. Even network retail platforms like iPhone or XBLA, which allow studios to keep betting on individual hits, have intermediaries taking their cut. Yes, the console manufacturers, Apple, Steam, Direct2Drive and the like take smaller shares than publishers, distributors and retail on traditional platforms, but there's nothing truly 'direct' about casual console or iPhone games.

MONEY FOR NOTHING

The most 'direct' routes of all are via games companies' own sites and on social networks such as Facebook – which, miraculously, demands no mandatory revenue share. Yet. Many MMOGs rely heavily on big traffic sites with which they share revenue to reach critical mass. Perhaps the most complex value chain is that for downloadable casual PC games where distributors and aggregators are used by developers and publishers alike. These are essential for getting many games to market.

Some offline publishers' marketing skills have little relevance in the online world – but on platforms such as iPhone and casual console where the retail experience is simply duplicated online, some of these talents are still useful. Wherever you find games charts, PR is still useful to generate interest and consumer awareness. Online ad campaigns are standard operating procedure for many online games, particularly on social networks. However, most online marketing techniques for customer acquisition (affiliate deals, viral customer acquisition, and live betas to name a few) will be alien to traditional sales/marketing teams.

> ***"Format-holders and download sites take smaller cuts than traditional platforms, but there's nothing 'direct' about casual console or iPhone games."***

And the many sophisticated upselling techniques are a completely new discipline in their own right, one vital to success and profitability. Indeed, virality, data-mining and, perhaps most importantly, self-perpetuating games community building are marketing disciplines almost unique to network gaming. These roles are nurtured in-house by online games companies, partly because they are so intrinsically tied into design.

SELLING POINT

The business of setting pricing and retrieving revenue is firmly in the hands of online companies, mostly because of its complexity. Many games have hundreds of price points to set, as well as discounting, promotions and tricky decisions about what is free and premium. Subsequently, revenue retrieval is a highly specialised area because taking payment for most online products beyond iPhone and casual console titles requires multiple transaction partners per territory. More new skills for online developers to learn.

iPhone titles like MiniSquadron aren't brought to market a traditional manner – meaning its developer has to learn new publishing skills

Publishers' responsibility for first line support on traditional platforms transfers almost completely to the online studio. Most technical support is handled in-house by online games companies, but some outsource support to specialists in non-core languages and territories. These components can grow to substantial scale, and being responsive to customers takes on a more critical role for online companies than their offline peers.

Traditional publishers will remain relevant through financial and brand power, and because they are transitioning both organically (by getting offline products online and elongating development and marketing cycles) and inorganically (by acquiring online businesses). The last decade's decline in overall market share for most traditional publishers will go on as online competitors grow new markets.

These online competitors, no longer easily defined as independents or publishers, are evolving the responsibilities of traditional publishers. But more importantly they have to learn a new range of commercial and service-driven disciplines to grow, and will need almost as many partners as the offline world.

So, do you need publishers in an online world? Yes, but many independents will become publishers themselves.

Rick Gibson is a director at Games Investor Consulting, providing research, strategy consulting and corporate finance services to the games, media and finance industries.
www.gamesinvestor.com

COMMENT: INDUSTRY

Saving games for posterity

by Owain Bennallack

I recently said farewell to a good friend I'd lived with for 15 years. Over that time my friend got much fatter and was seen out less in public, but we shared a lot of happy memories.

No, I don't mean my expanding waistline, though it is also testament to a lot of good times and hasn't seen the sun for years. I'm referring to my *Edge* collection – nearly 200 issues in all, including issues one to 100 and virtually all the special supplements, too.

Edge is the best consumer games magazine the world has ever seen – or ever will, now. Other good games mags come and go, but since the early 1990s *Edge* has consistently delivered unique reportage on the latest game hardware and software, and catalogued how yesterday's rumoured console becomes tomorrow's retro fodder.

I'm biased, of course – I was deputy editor of *Edge* for a short stint in the 1990s, and have occasionally written for the magazine ever since. Friends have, too.

Yet such affection wasn't enough to justify the vast number of magazines taking up space in my relatively small office. They had to go.

MUSEUM ENTRY

After years of carrying the hundreds of bundled copies from flat to flat, my decision seemed surprisingly disloyal. A friend, also a former *Edge* staffer, confided that selling his collection felt like "getting rid of the body under the bed". And I nearly lost my nerve, after spending two days re-reading several dozen articles from over the years.

The reason I was finally able to let go of my *Edge*s was when a new home became available – the National Videogame Archive. Donating the magazines seemed a much better idea than eBay-ing them for a few quid.

Before handing the handing over day arrived, I spent an hour carefully removing Post It notes from the copies I'd been involved in during my time on the editorial staff. Ironically, I later found out from the Archive's co-founder Tom Wooley that it would have preferred such historical ephemera to be left in place. Real-life notes about how a games journalist saw the magazine's presentation of games and the industry in the late 1990s had modest scholarly value.

It's hard to remember when we're living in the moment – but lots of common games development items (or old caveman-like tech) are the historical artefacts of the future

I suddenly realised how even as a bona fide opinion spouter, I hadn't grasped the big picture. If someone had scribbled production notes from the set of Casablanca or Mozart's shopping list, I'd immediately see the value. Obviously the doodlings of a games hack are very (very) far from that – David Braben's library tickets or John Carmack's parking tickets would be more valuable – but it all adds up to a record that future generations may appreciate when they come to consider the birth of video games.

YOU'RE HISTORY

How many of us ever think about how we're part of history? Few, I'd bet – yet there will be game developers reading this column who literally invented some of video gaming's most crucial innovations.

That's why the National Videogame Archive is such a brilliant idea. The truth is we don't yet know if video games will prove to be a cultural sideshow, like Morris dancing or wind-up music boxes, or rather the first steps to something integral to how the human race experiences and understands the world. I believe we're much nearer the latter than the former, but in any event we need to keep and show our workings so future generations can tell the tale.

> ***"How many of us ever think about how we're part of history? Few, I'd bet – yet there will be game developers reading this column who literally invented some of video gaming's most crucial innovations."***

If you have any interesting games or game development material, visit www.nationalvideogamearchive.org to learn more about the project, or check out savethevideogame.org to hear what other game developers think. My thanks to Alex Wilshire and Edge magazine for filling in a couple of gaps in my collection.

Owain Bennallack is executive editor of *Develop*. He edited the magazine from its launch until its February 2006 issue. He has also worked at *MCV* and *Edge*, and has provided consultancy and evaluation services to several leading developers and publishers. He is also chairman of the Develop Conference advisory board.

INDUSTRY ANALYSIS SPONSORED BY Bethesda SOFTWORKS

COMMENT: DESIGN

Balancing Act

by Billy Thomson, Ruffian Games

Striking the perfect balance of difficulty for a video game is one of the trickiest parts of development for me, and I'm guessing that I'm not the only designer that finds this particular area troublesome.

The main problem is we can sometimes spend years developing a game from start to finish and by the time we reach the balancing phase we've likely clocked up hundreds of hours playing through the game over and over again to the point that we can close our eyes and see where the enemies will come from, where we need to be to make best use of the cover on offer and where that perfect place just to the left of the tattered poster on the wall behind the hidden sniper is to bounce our grenade so it lands perfectly at their feet undetected. We're basically so close to the game at this stage that we can't see it for what it is. It's incredibly difficult to retain any sort of perspective at all when it comes to judging how hard your game is, which makes striking the right difficulty balance a real challenge.

DIFFICULT SITUATION

Thankfully the publisher will have their own team who focus entirely on this aspect of the game. This team are a massive help, but going through the testing phase – or Usability as Microsoft refers to this process – can be a terribly frustrating and demoralising stage of the game development process for a designer. You've tweaked the game to the point that you think it's playing spot on, the objectives are clear, the obstacles are varied and challenging, it's fun to play, in your opinion it's ticking all the right boxes. As far as you're concerned bar a few bug fixes, it's ready to go out the door and into the player's eager hands. Then the game goes through its first usability playtest and you're suddenly handed a large amount of data that suggests that nobody can figure out what they're supposed to be doing and when they finally do they find the objectives too difficult to complete, basically the game is not ready for the gaming public.

It's nothing short of soul destroying, but painful as it is, it's exactly what you need to hear. Unfortunately the cold hard truth is we don't make games for ourselves, we make them for the general public, and that audience don't have the luxury of enjoying

> ***Going through the testing phase – or Usability as Microsoft refer to this process – can be a terribly frustrating and demoralising stage of the game development process for a designer.***

the same in-depth knowledge of the game world and its mechanics; they haven't logged hundreds of hours mastering the controls and figuring out the behaviours of the enemy. They've just picked the game up for the first time and they need to be taken through the game slowly, a little bit at a time. They're like infants that need to learn a whole new world with the developers more akin to a cynical old man with a vast amount of experience and lack of tolerance for the uneducated.

THE MUPPET SHOW

Normally we're still stinging from the feedback we've got, so for a while rather than referring to them as the 'cute wee gaming cherubs' all we can do is sneer and refer to them as the 'ham fisted muppets'. After a few playtest sessions that sentiment passes and as we grow calmer we begin to accept that the game does have flaws that must be addressed, when we get to that point we're ready to get stuck in and start making the necessary changes.

Striking the right balance in difficulty can be precarious – but are we raising a generation of gamers not used to games that pose a challenge, like Ninja Gaiden (above)?

I have to say I do worry that we're starting to make games that are potentially too easy to complete. I still look fondly back on the days of the early Spectrum games that were sometimes insanely difficult to complete. I know we can never make games that have that level of difficulty anymore, we're aiming at such a wide audience that it would be commercial suicide, but it doesn't stop me longing for the truly selfish opportunity to make a game that would be genuinely challenging to the people who made it.

I've been doing this job for over 14 years now and while I've definitely improved my ability to keep a decent level of perspective I've still not mastered the art. I can honestly say that I'm further on than some of the complete nutters that we have on the design team at Ruffian right now, it would seem to me that some of them wouldn't mind hooking up electrodes to the 360 pads and electrocuting the player every time they failed an objective. I think the Usability team at Microsoft would probably be against the idea, though.

Billy Thomson is the creative director of newly-formed developer Ruffian Games. Billy has over 13 years experience of designing video games, including design roles on *Grand Theft Auto* and *GTA2*, before working as lead designer on Realtime Worlds' celebrated *Crackdown*.
www.ruffiangames.com

COMMENT: INDUSTRY

Political Paralysis

by David Braben, Frontier Developments

Seeing Gordon Brown boasting about the games industry as 'leading the way in Europe' is rich. Since 2001 we have seen educational standards decline, inward investment discouraged, and other countries steal a march on us with tax breaks.

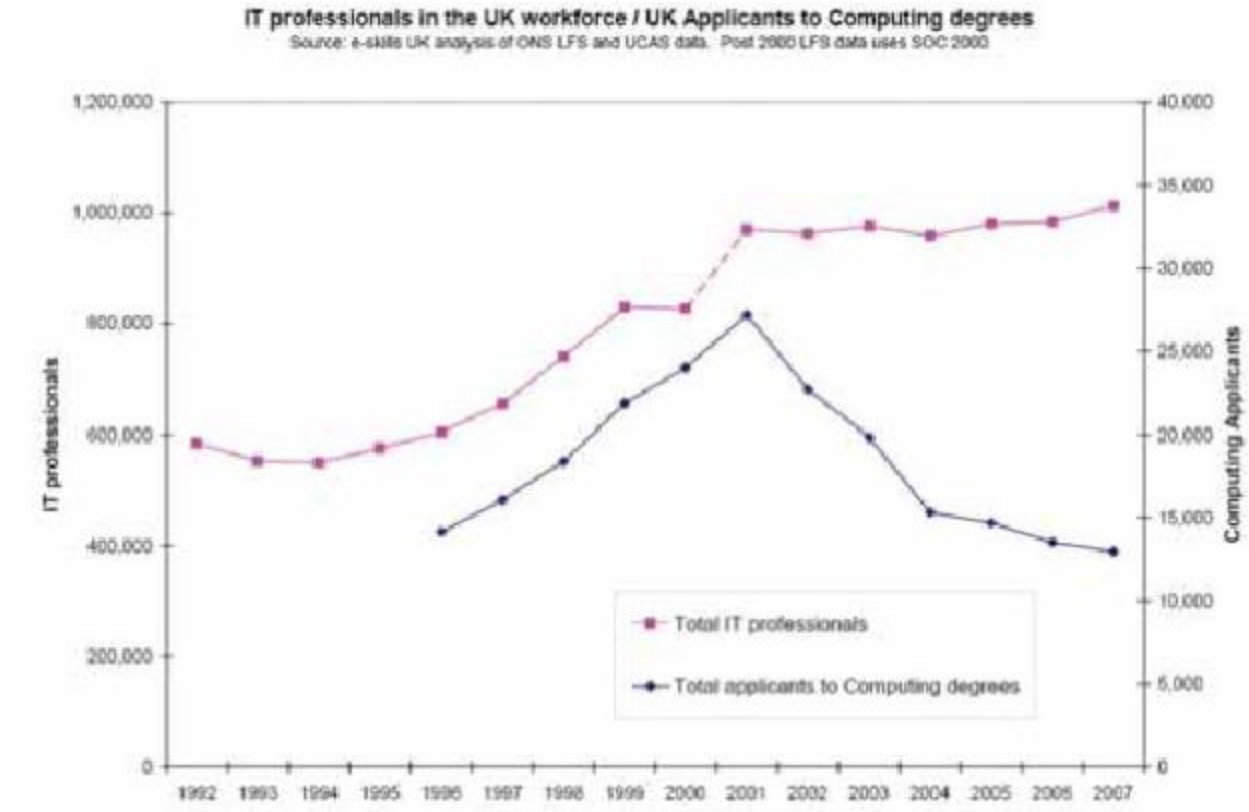
There has been plenty of talking about issues for our industry with inward investment – but in comparison. There has been little discussion about the parlous state of education, and how it affects our industry with the lack of educated candidates.

Student numbers applying to study key 'STEM' subjects (Science, Technology, Engineering and Maths) are declining dramatically in the UK, particularly in computer science. We need these skills as a country, not just for the games industry.

Since 2001 the number of applicants to computer science courses at university in the UK has halved (down by 52 per cent) – and this is over a period when university attendance is up by 24 per cent. Meanwhile the number of employed IT professionals in the UK (not just games) has continued to increase over the same period. This is a very serious problem for computer science courses, including here at Cambridge. Some have chosen to drop standards to get more people on to their courses and avoid bankruptcy. Something is very wrong, and it is throttling the new programming blood coming into our industry.

There are a number of possible reasons. Government has incentivised universities to get 'bums on seats' – and it really doesn't matter to them how clever or suited to the course that 'bum' is. There is no minimum quality standard, but the university is penalised financially if the student fails. This has caused the rise of the 'soft' course; courses designed to be very easy, mostly variants on media studies, many of which have been based around games.

Having said that, I don't think that is the main reason for the stark decline, as you can see for yourself in the shocking graph above, courtesy of the CPHC and eskills. Anecdotally, asking students which subject was the most boring for them in school, almost without exception they say 'ICT' (information and communication technology). Put cruelly, ICT is the ability to find the power switch on a computer, and use Microsoft Word and Excel at a basic level. We know something has destroyed interest in computer science, and



There has been a severe decline in the number of applicants to computing degrees versus the number of actual IT professionals

ICT is the most likely candidate, especially given the timing of the drop in applicants.

ICT is a direct result of a political edict, via the National Curriculum. It was clearly well intentioned, trying to give all children a basic knowledge of IT, but as with many ill-considered political initiatives, it seems to have had this somewhat inevitable

> ***Something is very wrong, and it is throttling the new programming blood coming into our industry.***

consequence, especially since the majority of the children on many such courses may be more knowledgeable then their teacher (since any available teacher can and does teach ICT).

Much as the UK has reaped the substantial benefits of the BBC Micro generation in the early '80s (like me), the UK will reap this negative whirlwind in future years. Though clearly damage has been done, our industry can still be a force for change for the better.

We are one of the few UK-based industries that can clearly motivate young people to engage with education. I have given talks at universities, even marked coursework (not for the faint hearted), and I know many others do so too, like Blitz and SCEE. But this is not what I am talking about. Games can be used in class to engage children with more advanced concepts, but this needs changes to the National Curriculum – for example to allow the brighter kids to swap ICT for computer science at GCSE level and earlier.

The current government has been in a state of paralysis for a long time. There are a few clarion voices within government who do care (Tom Watson, for example), but many of the key people are too busy clinging on to power and expense accounts, while hoping we will forget about the mess they have created.

I have high hopes for the Opposition (with people like Ed Vaizey, Don Foster and Nigel Evans), and for the new blood (of all colours) coming in at the next election. There is even talk of election promises. Let's hope it will make a difference. As I think Al Capone said "Vote early, vote often!"

David Braben is the founder of Cambridge-based Frontier Developments. Best known as the co-creator of *Elite*, Braben has contributed to, designed or overseen a number of other projects including *Frontier: Elite II*, *Dog's Life*, *Thrillville* and *LostWinds*. Frontier is currently developing his next title, *The Outsider*. He is also closely involved with Skillset.
www.frontier.co.uk

INDUSTRY ANALYSIS SPONSORED BY Bethesda SOFTWORKS

COMMENT: BUSINESS

New Platforms

by Ben Board, Microsoft

So Gamefest was a big success. If you were there I hope you found it entertaining and useful (and that you were honest – in a nice way – on your feedback forms). After the months of planning, with the spreadsheets full of delegates, sessions and speakers, and all the conference calls and the email threads that could stretch to the moon and back, it felt faintly weird that it culminated in an actual event.

Maybe that's the coder in me. Software engineering is industrial-scale abstraction. It's called engineering because it's a process far closer to building a car than to writing a book, yet like the latter the result is an experience entirely for our minds.

At times as a producer I'd look at a building site and try to imagine creating something tangible. Virtual worlds I've helped create have been at least as complex as an office block; but it's quietly profound that we spend our careers creating things that are ontologically challenged, metaphysically speaking – they sort of don't exist.

Making hardware, though, is something else. Compilers and 3D modelling tools are replaced by soldering irons and, well, more 3D modelling tools, but this time plugged into big, oily machines that spit out stuff you can actually hold in your hand. I was allowed into the birthplace of the Xbox once – the Redmond hardware lab – and it might as well have been Mars. These people had screwdrivers – and not just to change their graphics card.

TWO OF A KIND

It's refreshing when the conceptual becomes physical, and in our world this year it will happen twice. Natal is one, and the other is Windows Phone 7 Series, both due to launch at the end of this year. We may not be manufacturing the phones ourselves – we have hardware partners, with their own screwdrivers – but both will offer new opportunities for developers. And both are keeping us busy.

The mornings may be frosty and the crocuses reaching for the snooze button, but the team readying Natal for release might be wondering why they can't buy tinsel in the shops yet. Anyone in games dev can attest to how the calendar contracts in the last stages of a project. When you're shipping a platform that counts double. In one sense the street date for Natal directs manufacturers and marketeers more than software engineers, who have a much more pressing deadline: long before launch the XDK team must provide developers with the final libraries approved for inclusion in the first wave of Natal titles. For the Natal software team Christmas has come early this year.

But there are other aspects of the development of new platforms that are equally important as its software. For one, new policies and technical certification requirements (TCRs) need to be drafted, debated and decided.

> ***"In one sense the street date for Natal directs manufacturers and marketeers more than software engineers, who have a more pressing deadline: the XDK team must be ready before launch."***

Why do we define TCRs? In the simplest sense, we've gone to the bother of building hardware and software that we want players to enjoy safely whatever game they're playing, and so we define TCRs to set minimum standards in four key areas – security, integrity, consistency, and policy – and employ a Certification team to enforce them. Let's look at those areas.

ON TOP FORM

Security is vital. Developers, publishers and Microsoft put their IP on the box and want it to stay there. Any hardware or Live-accessing behaviour that gives the Cert team the fear will result in a swift condition for resubmission (CFR).

Next, if Johnny's spent forty quid on a game it should also work reliably, with no repeatable crashes or poor performance that reflect on the platform as well as the title, so we set standards accordingly. We also believe

that players should do platform-specific stuff identically no matter what the title, such as reading the same terminology, spending points in the same way, having one way to send and act on game invites, and the like, to lessen the risk of confusion.

Let me stress the fourth one – policy. TCRs exist to ensure we all meet our obligations to our players' legal rights, such as their privacy, but you should be aware that TCRs are not the only hurdles towards certification. You may know that publishers submit a Concept Submission Form (CSF) to us in order to get a title approved.

This important document calls out significant features in the game, and can trigger conversations with your DAM if it describes policy-sensitive areas. We love to see great Live features, though, and if you get in touch in good time we can guide you through. We can also put you in touch with the Cert team at any time, or help you arrange a Pre-Cert or Optional Final to improve your odds come final submission.

Our two new platforms for 2010, Natal and Windows Phone 7 Series, will bring their own sets of standards. The DAM team can help developers learn about both of these new platforms, their features, requirements, policies and opportunities.

Ben Board is European developer account manager at Microsoft, supporting all studios working on games for Xbox and Games For Windows platforms. He previously worked as a programmer and producer at the likes of Bullfrog, EA and Lionhead.

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DEVELOPMENT FEATURES, INTERVIEWS, ESSAYS & MORE

ABOUT TIME!
In depth look at the BBC's new episodic Doctor Who game, p26

Regional roundtable: Oxfordshire
p34

Usability testing in focus: Part 2
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Q&A: InstantAction's Louis Castle
p43

Want one of these?

Fancy winning a shiny new Develop Award? Read our guide to find out how you can lobby for a prize, p20

HOW TO WIN A DEVELOP AWARD

In three months the cream of European games development will once again descend on Brighton to see the best of the best honoured at the 2010 Develop Awards. But how can you make sure you are in the running to win one? Across the next five pages we run through the criteria for each. And pay attention, there are some changes and new awards…

DEVELOP INDUSTRY EXCELLENCE AWARDS CATEGORIES 2010

CREATIVITY

Best New IP
Best Use of a Licence or IP
Visual Arts
Audio Accomplishment
Publishing Hero

TECHNOLOGY & SERVICES

Technical Innovation
Best Tools Provider
Best Engine
Creative Outsourcing
Services
Recruitment Company

STUDIOS

Best New Studio
Business Development
Best Micro Studio
Best Handheld Studio
Best Independent Studio
Best In-House Studio

SPECIAL RECOGNITION

Development Legend
Grand Prix

AN EVOLVING EVENT

To reflect the ever-changing nature of games development there are a few changes to the 2010 Develop Awards.

From an actual prize perspective, the awards are a mix of the new and classic – last year's Best Engine category is back, while long-running accolades like Best New IP, Best Independent Developer and Business Development remain.

However we've also added in Best Micro Studio, a new award to acknowledge the burgeoining and busy indie scene in the UK and Europe. What does 'indie' mean? To most it's a vague, ethical label – but we've drawn the boundary to teams of 10 staff or less, working on self-funded original IPs.

Another big change is when it comes to cost. We know budgets are tight, so we've reduced the prices for tables and tickets to make the event as accessible as possible. 500 games development execs from across the industry and around the world usually turn up to the Develop Awards, and it's now never been easier to join them.

New prizes for disruptive developers, along with more affordable admission, are just two facets of an awards show that gives everyone pushing the boundaries of games development, both creatively and commercially, their moment in the spotlight.

But none of that will happen without suggestions from readers on who should be put forward as a finalists. So read through the next few pages and have a think about whether you, your partners, or colleagues should be considered.

As ever, lobbying is free, and is an open process that allows everyone to have their say. It's the only way to make sure that the right people get their chance to shine on the night of July 14th at the Metropole Hotel in Brighton. See you there.

Michael French
Editor-in-Chief
Develop

CREATIVITY

BEST NEW IP

WHO'S ELIGIBLE?
Any UK or European studio-made IP released in the last year – download or otherwise – that has introduced a new brand, gameplay aspects and/or original characters to consoles, portable devices or PC.

LAST YEAR'S WINNER
2009: *LittleBigPlanet* (Media Molecule)

PREVIOUS WINNERS
2008: *Lost Winds* (Frontier Developments)
2007: *MotorStorm* (Evolution/SCEE)
2006: Console IP - *Buzz!* (Relentless/Sony External Development) PC IP – *Fahrenheit* (Quantic Dream)
2005: *Far Cry* (Crytek)

BEST USE OF A LICENCE OR IP

WHO'S ELIGIBLE?
Any game released in the previous 12 months by a UK or European studio that is a proven quality title but is based on an external property (licensed or otherwise) not owned or created by its developer.

LAST YEAR'S WINNER
2009: *LEGO Batman* (Traveller's Tales)

PREVIOUS WINNERS
2008: *LEGO Indiana Jones* (Traveller's Tales)
2007: *LEGO Star Wars II* (Traveller's Tales)
2006: *King Kong* (Ubisoft France)
2005: *LEGO Star Wars* (Traveller's Tales)

VISUAL ARTS

WHO'S ELIGIBLE?
Any UK or European studio that has demonstrated impressive graphical and/or distinct, memorable design work in the games or gaming content it has produced and released during the past year.

LAST YEAR'S WINNER
2009: Media Molecule (*LittleBigPlanet*)

PREVIOUS WINNERS (BEST ART & AUDIO)
2008: Rockstar North (*Grand Theft Auto IV*)
2007: Rare (*Viva Piñata*)

AUDIO ACCOMPLISHMENT

WHO'S ELIGIBLE?
Any UK or European studio, or creative services company working in the audio space, that has demonstrated pitch-perfect audio design, sound or music skills in its output during the past year. Use of licensed and original tracks can also be taken into account.

LAST YEAR'S WINNER
2009: Lionhead Studios (*Fable II*)

PREVIOUS WINNERS
2008: Rockstar North (*Grand Theft Auto IV*)
2007: FreeStyleGames (*B-Boy*)

PUBLISHING HERO

WHO'S ELIGIBLE?
Any games publisher, developer, hardware manufacturer or platform-holder from any country that has supported the UK and European games developers during the past year via the publishing, distribution co-development and/or funding of new games.

LAST YEAR'S WINNER
2009: Apple

PREVIOUS WINNERS
2008: Nintendo
2007: Sega
2006: SCEE
2005: SCi

TECHNOLOGY & SERVICES

TECHNICAL INNOVATION

WHO'S ELIGIBLE?
Any UK or European studio or company that has demonstrated impressive technical innovation in any aspect of games development. The award can be given to a specific technology, title or studio – provided it has been active/released new product in the last 12 months.

LAST YEAR'S WINNER
2009: *LittleBigPlanet* (Media Molecule)

PREVIOUS WINNERS
2008: NaturalMotion/Image Metrics (*GTA IV*)
2007: Realtime Worlds *(Crackdown)*
2006: Relentless/Sony External Developments *(Buzz!)*
2005: Morpheme *(Bluetooth Biplanes)*

BEST TOOLS PROVIDER

WHO'S ELIGIBLE?
Any company, of any nationality, that has released middleware or tools which have enhanced or supported the work of UK or European games development teams in the past year. Developer collaboration, new versions and industry relations are all key to winning.

LAST YEAR'S WINNER
2009: Autodesk

PREVIOUS WINNERS
2008: Epic Games
2007: Havok
2006: NaturalMotion
2005: Havok

CREATIVE OUTSOURCING

WHO'S ELIGIBLE?
This award acknowledges businesses or individual external contractors who have helped produce, manage or directly generate creative material – in areas such as audio, art or writing – for games released in the last 12 months.

LAST YEAR'S WINNER
2009: Side and Sidelines

PREVIOUS WINNERS
2008: Richard Jacques Studio

BEST ENGINE

WHO'S ELIGIBLE?
Now in its second year, this is an award for the best third-party engines. It's open to any engine, regardless of where it is made, that has enhanced the work of UK or European games development teams in the past year. Weight is given to new versions or significant upgrades.

LAST YEAR'S WINNER
2009: Epic Games

SERVICES

WHO'S ELIGIBLE?
Any UK or European company that provides core games services or other functions supporting the world's games developers in fields such as testing, user experience, localisation, quality assurance, motion capture and the like.

LAST YEAR'S WINNER
2009: Audiomotion

PREVIOUS WINNERS
2008: Babel Media
2007: Babel Media
2006: Side UK
2005: Babel Media
2004: Audiomotion

RECRUITMENT COMPANY

WHO'S ELIGIBLE?
Any UK or European company working in the field of recruitment and human resources that has successfully served the needs and demands of the UK and/or European development community during the last 12 months.

LAST YEAR'S WINNER
2009: Amiqus

PREVIOUS WINNERS
2008: OPM
2007: Datascope
2006: OPM
2005: Datascope
2004: Aardvark Swift

STUDIOS

BEST NEW STUDIO

WHO'S ELIGIBLE?
Any new UK or European studio which has had its first game commercially released – either via retail or digital distribution – during the past year. However, companies do not need to have been founded during that period to qualify.

LAST YEAR'S WINNER
2009: Media Molecule

PREVIOUS WINNERS
2008: Doublesix
2007: Realtime Worlds
2006: BigBig
2005: Juice Games
2004: Swordfish Studios

BUSINESS DEVELOPMENT

WHO'S ELIGIBLE?
Any UK or European studio that has, in the previous 12 months, improved its business as demonstrated by acquisitions, investments both inward or outward and/or steps to improve its output, efficiency or the company's commercial performance.

LAST YEAR'S WINNER
2009: Playfish

PREVIOUS WINNERS
2008: Realtime Worlds
2007: Blitz

BEST HANDHELD GAMES STUDIO

WHO'S ELIGIBLE?
Any UK or European games development company creating and/or producing games for mobile devices and/or handheld games platforms, such as iPhone/iPad, Android, PSP or DS. Studios should have had some significant output in the last 12 months.

LAST YEAR'S WINNER
2009: Rockstar Leeds

PREVIOUS WINNERS
2008: Idealworks 3D
2007: Rockstar Leeds
2006: Gameloft
2005: Morpheme
2004: IOMO

NEW AWARD FOR 2010

BEST MICRO STUDIO

WHO'S ELIGIBLE?
A new award for 2010 representing the diversity in the games development scene, this award is for any UK or European games developer – consisting of an individual or small collective of people up to a maximum of 10 – who have had significant, self-funded and original output in the past year.

BEST INDEPENDENT STUDIO

WHO'S ELIGIBLE?
Any UK or European games development company, that is 11 staff or more strong, which is not owned or managed by a publisher working on any available game platform. Lobbying studios should have had some significant output in the last 12 months.

LAST YEAR'S WINNER
2009: Media Molecule

PREVIOUS WINNERS
2008: Splash Damage
2007: Traveller's Tales
2006: Traveller's Tales
2005: Traveller's Tales
2004: Crytek

BEST IN-HOUSE STUDIO

WHO'S ELIGIBLE?
Any UK or European publisher-owned games development company or in-house games development resource – including those acquired recently – working on any currently available games platform with title(s) released in the past year.

LAST YEAR'S WINNER
2009: Rockstar North

PREVIOUS WINNERS
2008: Rockstar North
2007: Ubisoft France
2006: Criterion
2005: Rockstar North
2004: Ubisoft France

INDUSTRY RECOGNITION

DEVELOPMENT LEGEND

WHO'S ELIGIBLE?
The winner of this award, especially chosen by the *Develop* team, is an individual who has made a significant impact on games development – in a commercial, creative or technological sense – during their lifetime and career.

PREVIOUS WINNERS
2009: Phil Harrison

OTHER PREVIOUS WINNERS
2007: Ian Hetherington
2006: Charles Cecil
2005: David Braben
2004: Peter Molyneux

GRAND PRIX

WHO'S ELIGIBLE?
This is a special award from *Develop*, bestowed upon a European individual or company in recognition of outstanding achievements in games over the past 12 months. The candidate is decided after soundings from the industry.

LAST YEAR'S WINNER
2009: Codemasters

PREVIOUS WINNERS
2008: Rockstar Games
2007: Sony Computer Entertainment
2006: Bizarre Creations
2005: Creative Assembly
2004: Sony London Studios

Need to know more?

WHEN DO THE AWARDS TAKE PLACE?
The Develop Industry Excellence Awards take place on **Wednesday, July 14th, 2010** at the **Hilton Brighton Metropole Hotel**.

HOW CAN MY COMPANY ENTER?
This one's simple. All you need to do is send a short pitch, either as a Word document or plain text email, to *Develop*'s editor-in-chief at **Michael.French@intentmedia.co.uk**

Give us a bit of history and highlight your company's key achievements in the last year – and don't forget tell us what awards you want to be considered for.

But you don't need to go into masses of detail, we only need an overview and a run through of what your key achievements/recent releases. We know the industry well – and have probably heard of you.

You're also actively invited to lobby for other companies in the games industry – be it publishing partners, your favourite services or outsourcing firms, and studios you respect and admire.

WHAT'S THE ELIGIBILITY PERIOD?
For those awards criteria based on newly released products, please note that to be eligible the **games in question must have been released somewhere in the world by the end of May**. That counts whether the game is a physical or digital release.

WHEN IS THE DEADLINE FOR LOBBYING?
We need all your ideas, details and suggestions by **May 13th**. There will be plenty of reminders issued via **www.develop-online.net**.

SO WHAT'S THE JUDGING PROCESS?
When the nominations are all in, they are appraised by the *Develop* editorial team. The team then decides upon a shortlist for each award based on the lobbying documents and industry standing.

Profiles of the shortlisted companies are then sent out to a judging panel of 100 industry executives chosen by the *Develop* team. The judges confidentially disclose their choices and those with the most votes win. Simple. Judges are only named after the event.

I WANT TO COME! HOW MUCH IS IT TO ATTEND?
Given the increased pressures on developers' wallets and studio budgets in 2010 we've actually dropped the prices – how many award events can say that?

Early bird prices, for those tickes or tables booked on or before June 7th, are:

Gold Table of 10 – £1,975 + VAT; Standard Table of 10 – £1,750 + VAT; and Single Seats – £175 + VAT.

After June 7th the prices change to:

Gold Table of 10 – £2475 + VAT; Standard Table of 10 – £2290 + VAT; and Single Seats are £235 + VAT.

To book your place at the event contact **Kathryn.Humphrey@intentmedia.co.uk**

CAN I SPONSOR THE EVENT?
There are a number of excellent promotional possibilities at the event that include category and award sponsorship, plus supporting coverage to raise your profile before, after and during the event.

Contact **Katie.Rawlings@intentmedia.co.uk** for more information on how you can get involved.

"Regulation of phone-paid content isn't my problem."

Well, it soon might be...

If you develop games or software apps for mobile phones that are paid for through a phone bill or pre-pay credit, new regulations enforced by PhonepayPlus might be about to affect you.

You may not be aware of PhonepayPlus – the phone-paid (premium rate) services regulator – but it is currently drafting a new Code of Practice that protects consumers from misleading promotions, poor pricing information and the few rogue services that can damage the reputation of the rest.

Under the proposed new rules, it could now be you – not the aggregator – who would be responsible for what is sold to a consumer, how you promote it and how you charge for it.

PhonepayPlus will soon be consulting on these major changes that could significantly affect you and your business. We would very much like to hear from you as soon as possible.

So, if you want to talk about any concerns or ideas, please get in touch:
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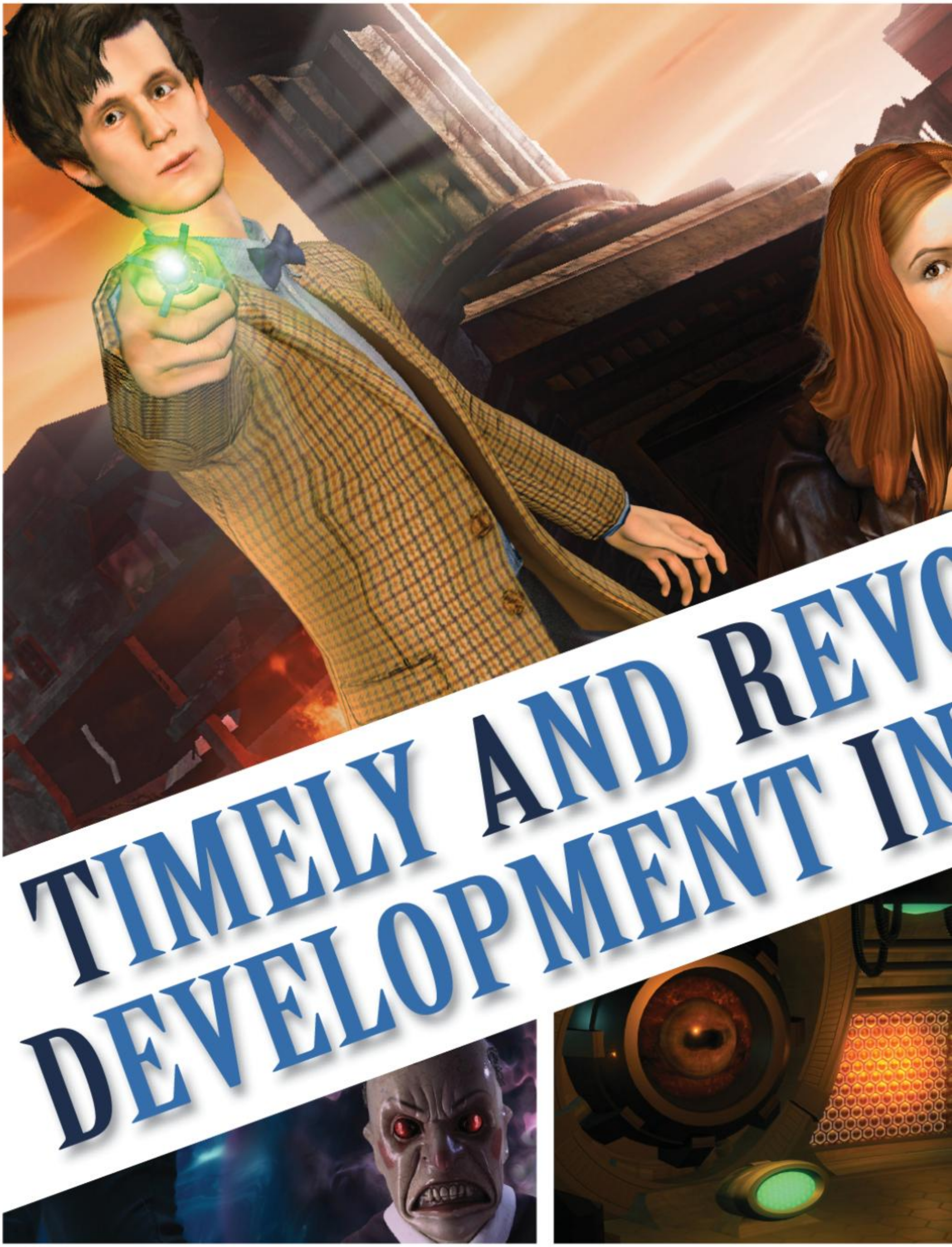

TIMELY AND REVO
DEVELOPMENT IN

EVOLUTIONARY SHEFFIELD

The BBC has turned to games in a big way – Doctor Who's TV producers are hard at work on a new episodic title made by Charles Cecil and Sumo Digital. **Michael French** took a trip to BBC Cardiff to find out why the time is right for the last Timelord to leap into games…

In the same way you could incorrectly view the TARDIS as just a wooden blue box, to the untrained eye *Doctor Who: The Adventure Games* is just another licensed game.

But step inside this unique joint production between TV show and the game – as *Develop* was lucky enough to do in February – and you see that the game (or rather, games) - is an epic project unlike any other.

A quick guided tour of its impressive features: it's free, it's released in four episodic chunks, it's on PC and Mac, its first installment is out in just a few weeks, and it's one of the closest collaborations between Big Media and games development ever seen.

Doctor Who: The Adventure Games is produced by one of the most successful UK independent studios of recent years, Sumo Digital, and fittingly overseen by adventure game auteur Charles Cecil – both working in tandem with new series boss Steven Moffat and the rest of his team.

It's also the UK games industry's best-kept secret, having been in the works since January 2009.

WHO'S GAME?

The timing for the game couldn't be better.

As gaming seeps into the mainstream, the BBC finds itself facing new challenges. The global broadcaster has to keep its big entertainment properties like *Doctor Who* relevant by regenerating them for the moving target that is TV audiences.

That means a whole host of things. The show itself has a new actor in its lead role, plus a new production team, and even new sets.

At a higher level it means finding new ways to engage the viewers that watch the Saturday night episodes but want more, or are drifting away from TV to channels like mobile, the web and, of course, video games.

Pitched as not 'just' a game, but four extra episodes of the new series, *Doctor Who: The Adventure Games* helps the BBC address new online mediums.

But hold on. The BBC isn't any good at games, is it? There were duff *Doctor Who* games before – text adventures, a dull FPS – and BBC Multimedia, run by BBC Worldwide, crashed and burned with the CD-ROM.

Simon Nelson, the BBC Vision's controller for portfolio and multiplatform, is the first to admit that prior form hasn't been brilliant for the BBC or *Doctor Who*. And as the man who greenlit this latest effort, he can explain the the thinking behind the new game.

"In drama, and stories in general, we have always been fascinated by the potential of the participative medium that is the internet and online – and how we can fuse the new participative features that the web enables with our traditional skills in storytelling, writing, production," he tells *Develop*. "And if

Matt Smith and Karen Gillan play the new Doctor and companion Amy – both have provided their likeness and voices to the game

the BBC is to stay relevant to younger audiences it needs to stretch its traditional content beyond TV and radio. But we had delivered some poor results in the past from not having the level of expertise to do that."

Successfully making a game of *Doctor Who* needs the right games industry talent, then. But bringing the right minds together to make the Doctor stand shoulder to shoulder with someone like Professor Layton led Nelson to cast a net across the UK, reaching from London to Sheffield via Cardiff and York.

A NEW VISION

It was London-based Nelson's discussions with *Develop* columnist Rick Gibson of Game Investor Consulting about how the BBC can improve its work in games that connected him with York-based Charles Cecil, head of Revolution Software – just as *Doctor Who* was going through a big creative change, with a new cast and crew stepping in at BBC Wales.

He explains: "We'd not gone the whole hog to work with an experienced games developer before, or an industry figure like Charles, and put them at the heart of the creative process with a TV brand to see what would happen. Charles was a natural fit when we put him together with new lead writer and executive producer Steven Moffat."

Before Sheffield-based Sumo was involved (there was a lengthy pitching process that included a number of high-profile European teams – see *'Pitch Perfect'*) – it was clear there was a spark between Cecil and the team in Cardiff. An original adventure game about the Doctor, that would be released alongside the TV show, proved too exciting an opportunity for Moffat to resist.

"One of the things *Doctor Who* does is that people don't just consume it, they all want to have their own go at it," *Who*'s new boss tells *Develop*. "I speak as someone who has been given the chance to make it – and children also love to make up their own episodes, invent their own monsters. The interactive quality of being inside an episode is very appealing, and being able to contribute to its outcome is exciting."

> ***"People don't want to just consume Doctor Who, they all want to have their own go at it. Children love to make up their own episodes."***
>
> Steven Moffat, Lead Writer, Doctor Who

BBC Wales' head of drama and fellow Who exec producer Piers Wenger agrees: "There's such a huge appetite for *Doctor Who* now in all its forms, be that web content or the show itself, we are just responding to the endless need for content around the show. We also have to keep finding innovative ways of satisfying the audience's love for for the Doctor's adventures. This is an innovative way to allow the audience – the young audience especially – to get immersed in it."

Anwen Aspden, executive producer at BBC Wales Interactive, says that games – *Doctor Who: The Adventure Games* will be distributed in 250MB episodes via the *Doctor Who* site – align perfectly with *Who*'s youth audience.

"When you talk about our online audience they know and absolutely love new content online such as the Comic Book Maker and the Trailer Maker, which allowed them to interact with Doctor Who," she says. "To build a new extension of that in games makes real sense."

As a key person bridging the gap between the TV team and new forms of content – prior projects include the *Doctor Who* animated web show 'Dreamland' – she's not to be underestimated when she calls the *Adventure Games* "a new form of drama".

GENESIS OF THE DRAMA

That alliance between gaming and drama is the key to *The Adventure Games*. It permeates the entire project and informs its structure, delivery and creation.

So yes, the game features the cast of the show – stars Matt Smith and Karen Gillan have been rotoscoped and animated (for stylistic reasons – see *'Designing the Doctor'*) and provided hours of voice work.

But beyond that, the episodic format mimics the show itself. The first three of the four adventure episodes are written by Phil Ford, responsible for *Doctor Who* special 'The Waters of Mars', episodes of *The Sarah Jane*

Above: The creative minds at BBC Wales, BBC Vision, Revolution and Sumo Digital collaborating on The Adventure Games. Clockwise, from top left: ***Steven Moffat****, lead writer and executive producer, Doctor Who;* ***Piers Wenger****, head of drama, BBC Wales and executive producer, Doctor Who;* ***Iain Tweedale****, editor, BBC Wales Interactive;* ***Charles Cecil****, executive producer;* ***Simon Nelson****, controller portfolio and multiplatform, BBC Vision;* ***Sean Millard****, creative evangelist, Sumo Digital;* ***Anwen Aspden****, executive producer, BBC Wales Interactive; and* ***Beth Willis****, executive producer, Doctor Who*

PITCH PERFECT

DOCTOR WHO'S lead writer and exec producer Steven Moffat explains how Sumo Digital beat out a number of high-profile rivals to the contract for making *Doctor Who: The Adventure Games*:

"This is the most amazing thing about this project," says Moffat with customary enthusiasm. "It was the moment that won them the job. Simply, they made the TARDIS bigger on the inside than it is on the outside. Not by cutting from one to the other – but you control the little fella, the Doctor, and he walks in and it's bigger inside than outside. That's it – the central magic of *Doctor Who* made flesh in a way only a computer game can do. I mean, we can do that on TV with a cut, and hide the trick. But it's seamless in the game."

Adventures, *Torchwood*, associated books and radio plays, and the script for *Dreamland*. The fourth episode is written by another *Doctor Who* scribe, James Moran, who wrote the series four episode that took the Doctor to Pompeii. (See 'Writing Who' for a look at how the TV writers collaborate with Cecil and co.)

As for the platform, the game is being made for PC and Mac – because the BBC has to be able to address the widest audience possible as part of its public service remit, and that's computer owners, not console owners. (That likewise explains why it's free, because the BBC cannot charge for content.)

SEEKING NEW AUDIENCES

The wider demographic mix means that *Doctor Who: The Adventure Games* isn't designed the way a normal game is. Its gameplay challenges are milder – the control scheme is simple mouse and keyboard and nothing more complicated – and its dramatic elements are stronger.

Explains Cecil: "Our approach is to make something that is like an interactive TV episode. You don't get stuck, but are challenged. You have to drive people to play, but not put them off – the reward to overcome the challenge is the next chunk of *Doctor Who* narrative.

"Generally the gameplay is driven by stealth, minigames and a little bit of object interaction. But it's not an adventure game where you are scratching your head trying to work out how to use two abstract objects together."

Adds developer Sumo Digital's creative evangelist Sean Millard: "We wanted to write a game that appeals to three generations – kids, their parents and older viewers. But that audience is so wide we can't really have them stopping to think for more than two minutes – it's not that your hand is held, you make your own way independently through the game. But the challenge is never about you sitting back and scratching your chin."

Like the show itself, *The Adventure Games* don't drag their feet in getting to the action, and don't skimp on the unorthodox ways the lead character deals with tricky situations – something that show runner Moffat was keen to encourage from the off.

"It has to be like *Doctor Who* – not just use some of the visuals," he says. "It needs to be like it as an experience, otherwise you are not providing what you are promising. What you're promising is that this is like being in an episode – like participating in an episode."

Moffat is very game literate, and points to his own game experiences – and frustrations – when talking about his input to the project.

"I loved the beginning of *Tomb Raider*, but I eventually got really bored with it. You were always shooting things – and the shooting parts are really, really dull. I always wanted to solve the problem of the big tomb, not worry about how long it's taking to kill a sodding lion – and that's not even exciting, because you're not really killing a lion anyway, you're just pressing a button.

"But [in our game] you're solving a puzzle. And the Doctor is a great character to just be in the company of or to play in the adventure. You're solving puzzles, you're being clever. I'm not condemning them, but the violent aspect of other games is just fucking boring. I was playing *Halo* the other night and I'm more interested in how lovely the world is – I turn to the easy settings to get through it quicker. I'm interested in finding new things to explore."

DISCOVERING NEW WORLDS

Exploration and education are a key part of *Doctor Who: The Adventure Games*.

As a BBC project the game episodes have to satisfy the broadcaster's public-service remit, which dictates that its output must inform, entertain or educate. That puts *The*

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PETER MOLYNEUX

With a games development career spanning over twenty years, Peter Molyneux has founded two UK development studios Bullfrog Productions and Lionhead Studios. Both studios were massively successful and between them have released over 20 top selling games including Populous, the world's first god game, Theme Park, Dungeon Keeper, Black & White and the Fable series.

Lionhead was acquired by Microsoft in 2006 and Peter is now Creative Director MGS Europe. He is currently working on Lionhead's Fable III for Xbox 360 and a further unannounced project.

SCOTT FOE

Called "Great Scott" by Edge Magazine, Scott Foe is one of the most revolutionary and insightful creators working in the industry today. Always out on the lip of where gaming is going, Foe began his career as a member of Sega's Dreamcast product development team, helping to launch the world's first online games console.

Foe also produced the world's first global, massively multiplayer mobile game, Pocket Kingdom, which was hailed as "The Ultimate Online Game" by GameSpy. At Nokia, Foe helped to launch the world's first online gaming handheld, and also produced Nokia's cross-platform flagship, Reset Generation, described by Pocket Gamer as "among the finest portable games ever made." According to Escapist Magazine, "Foe is the Quentin Tarantino of videogames; indie, intelligent, edgy - and able to make art from dross."

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Sumo Digital has been given permission to use classic Doctor Who enemies in its episodic adventure game – and even reimagine some of them (see below)

WRITING WHO

GIVEN THAT *Doctor Who: The Adventure Games* are designed as four new episodes of the TV show, developer Sumo Digital has had to set up a unique production pattern that mixes television writing smarts with game design.

Effectively all four game episodes are being produced simultaneously, staggered through pre-production and production phases – just like the TV series.

It also shares key writing talent from the show, but that's where most of similarities end, says exec producer Charles Cecil: "There is a tightrope to walk – for the brand, for the drama, for the game. You have to satisfy it all."

"The dramatic elements aren't as vast as they are on the show because we're trying to have as much of it as participatory as possible," adds Phil Ford, writer of the first three game episodes.

"So that means in terms of 'footage' each game episode has 20 minutes of dialogue or action as you'd see in the show – the rest is gameplay. Otherwise players would be fairly frustrated."

A game episode starts with a four page treatment from the writer, which Cecil and Sumo's creative evangelist Sean Millard read through for gameplay ideas and suggestions.

The writer then expands the treatment to seven pages that mix story and gameplay together, which Millard then turns into a high level 15-page design document that details tasks, minigames and challenges.

Sumo designer Will Tarratt then turns that into a much longer low-level design doc before the full script is written with dialogue and character motivation to form the the cut-scenes.

Ford is not convinced that there is much games or TV can learn from one another, however.

"But only because games and apply to TV are just so different," he says.

"When you sit down to watch an episode of *Doctor Who* it's a third person exercise, it's all given to you. In a game we expect you to get involved in the story. Those fundamental differences mean there isn't much the two can share."

Adventure Games in a unique position. The episodes feature both the typical, traditional game-y elements, supplemented with *Doctor Who* drama – and also an educational purpose unlike any other game.

For instance on a surface level, the game itself features historical notes about certain periods in time or the environments you visit, alien and Earth-bound.

"You visit some iconic locations from history in the first episode and we've hidden items which, when you find them, give you info about the history of that place," says Millard.

BBC Wales senior producer Mat Fidell adds: "We're hoping to inspire the 'Pompeii effect'. That was when, after the series four episode about Pompeii aired, viewers rushed to Google to find out more about the city."

> ***"I hope this will help demystify gaming, and teach people that it's not all shooters and horror, but actually really wonderful, immersive stories."***
>
> Simon Nelson, BBC Vision

But beyond that, the game also serves as a way to teach mass-market BBC viewers about games themselves. From a certain point of view *The Adventure Games* is not just a *Doctor Who* game – it hijacks the show's brand to prime the nation to try other games, too.

Cecil says that, dramatic and script elements aside, the difficulty level was potentially the most scrutinised part of the episodes in order to make that element work.

"There has to be a sense of progression, but it has to be easy enough that people don't get stuck for too long," he says. "We're looking into having an adaptive difficulty level so that if you have no expertise in games you could play and die four times but by on the fifth go it's impossible to lose. Part of the remit is to educate people about games. We have to keep players involved."

Adds Millard: "And some parents have a very stale view of what games are – that they are all about shooting and death. This is an educational experience on multiple levels that is entertaining, rewarding and informative. It's what games should be when trying to reach all those different audiences."

It's an approach fitting for Doctor Who. He is iconic amongst TV viewers in the UK and beyond for championing heroic actions and good deeds. *Doctor Who: The Adventure Games* champion games as a force for good honest fun, and computers as a way for BBC viewers to find those experiences.

That's all part of the grand plan according to Nelson back at the BBC HQ in London.

"I don't see this as having commissioned games – I see it as commissioning extra episodes of *Doctor Who*. Episodes that take all of the good public service reasons why the BBC does *Doctor Who* – an investment in storytelling, UK creative talent, and expanding the minds of our audiences with high quality content, and innovation – and extending them to another platform. And here we are delivering four episodes of two and a half hour's play where the level of impact is arguably higher than when you watch the TV programme."

It's a point worth remembering – and repeating. Talk to the crew in Cardiff, and they all say the same thing: It may be called *Doctor Who: The Adventure Games*, but in inception, spirit and execution its four episodic adventures are effectively an extra four parts of the fifth season's 13 episode run.

"We talk a lot about '360-degree commissioning' in our line of work, which is jargon, I know," says Nelson. "But to be frank a lot of the time we deliver 350 degrees TV and maybe ten degrees on web and mobile.

"Here we really wanted to make the project part of the entire series of *Doctor Who*, and instead of creating 13 episodes we created 17 – but for four you are the Doctor, and we take you to environments that we will never be able to take you on TV, and expose you to levels of engagement we can really deliver. We get closer to the show than ever."

WHEN WORLDS COLLIDE

Another impressive aspect of the production is the way game and the TV show are seriously intertwined. *Doctor Who*'s Cardiff production team have nurtured and welcomed the game in a way unlike any other hotly-tipped but otherwise disappointing film or TV and game crossover.

But that's not to say that plotlines run between game and TV show – series chief Moffat is keen to retain the purity of drama and story that any episode, interactive or otherwise, can offer.

"For us, whether it's an episode of the TV show or the game, they have to be complete and support itself," he tells *Develop*. "But we

always strive to make the series consistent. I used to hate it as a kid when those kind of things didn't match. These games are legitimately part of the *Doctor Who* universe so are consistent with it."

That means classic recurring villains – you know, the ones as much a household name as the Doctor and the TARDIS – will show up in the game, of course. But it also means the stakes are just as high – if not higher – with each game adventure.

"We can do things in those episodes that we can't do in the TV show," adds TV show exec producer Wenger, with a hint of envy. "We long to go to alien planets and to blow up the centre of London and go on the Underground in a post-apocalyptic world, but we can't do them on TV sometimes."

"Or if we do we'd need to have five cheap episodes after to make up for it," jokes Moffat.

So Cecil and Sumo have been given free reign to come up with some of the most ambitious *Doctor Who* stories ever told visually. Yes, London gets blown up – another episode is set leagues beneath the sea.

ONE DOOR OPENS...

The best anecdote covering how the game and TV productions have merged involves *Doctor Who* icon the TARDIS.

Rebuilt for the new Doctor, this time around it is bigger, with a multi-level main chamber, a steampunk control deck and, most importantly, doors to extra rooms.

"We got to see the set very early on," explains Cecil. "Ed, the head of design, became very excited by our requirements and showed us the new TARDIS to be sure our vision matched what they had. Prior to then we just thought it was cool that the game would allow you to explore the new TARDIS, partly because it is so different and new. But when we saw it the second time there were these new doors and stairs. I started to panic, and asked what they were for. Ed's reply was: 'Hang on, that's for you guys – you said you want to explore the TARDIS in the game'."

So the show's iconic set, which will be seen every Saturday night until summer, has been built with the game in mind. Players will be able to go through the very door they see on TV in the game itself to find the Doctor's drawing room, full of artefacts from the show's long history.

Fidell explains: "It's a new opportunity to introduce fans to the history of the Doctor. The drawing room features lots of iconic artifacts from his travels."

Adds Sumo Digital designer Will Tarratt: "That's one of the best bits of the whole design process – coming up with something I would get a kick out of as a player to investigate. That door you see in the show, it leads somewhere in the game and only exists because of the game. That's brilliant."

Cecil says it's a good example of how excited the production team are about the game, as well. "They've been very helpful in terms of making sure they are aligned."

It seems there has been a general flux of ideas and creativity between the new production team, new cast, and games design team as they jointly make a mark on the *Doctor Who* universe. Explains Millard: "Sometimes the TV team haven't exactly known the answers to some of our finer questions on the design front."

Things like the theme tune and the show's iconic opening title vortex weren't defined until later in the show's production, but the very fact someone outside of the TV team asked about these things seems to create "a unique relationship of chasing and leading, chasing and leading," he says.

"It's helped establish the relationship between game and show," Cecil adds.

Of course the show still drives the bulk of the creative vision, something Sumo respects after years toiling on Sega properties.

"We love that work, but with traditional publishers it's usually very one way," says Millard. Whereas on this game Sumo and the *Doctor Who* team have debated and discussed at length things like a new breed of Cybermen and other new things in the show's mythos *The Adventure Games* get to debut first, he adds.

> ***"This can redefine what people expect of a game in terms of its story and prioritise narrative as a part of the medium."***
>
> Charles Cecil, Exec Producer

In one interactive episode, the Doctor and companion Amy visit one of the most famous planets in the show's history – but one barely seen on TV in any real detail. That means Sumo has had to define the look and feel of it, something that the TV crew has promised to adhere to should the show itself ever go there.

"When the previous *Doctor Who* visited some of the iconic locations, they were shrouded in mist or very closely shot – for good budgetary reasons," explains Cecil.

"The team here gave us free reign on those locations to just go for it, live up to the legacy and create things that are epic and menacing. Its an amazing thing – the game is defining what some of those big things in the *Doctor Who* mythos look like."

No one *Develop* speaks to involved in the project is corporately bland enough to use the word synergy – but the stars really have aligned on the game to make sure this isn't just some throwaway game but a living, breathing part of *Doctor Who*.

THE DOCTOR'S HEALING TOUCH

Can the rest of the industry benefit from this nevertheless ambitious new project?

Yes, it's exciting and sees a UK studio – backed by the BBC, no less – make good on the episodic model that has been hard to crack. But the challenges *Doctor Who* as an IP faces in making the move to games are unique to this project alone.

That may be true – but Nelson and Cecil say there is a good after-effect to the story behind *Doctor Who: The Adventure Games* for the rest of the industry.

"There are plenty of anecdotes about how the TV show and game have worked together – these are the things we can do as the BBC that no one else can do," says Nelson.

"But that scale, ambition and level of integration with TV – and then being able to reach mass audiences… Well, hopefully that will show viewers something they've never done before and introduce them to new forms of content and interactivity. I hope this will help demystify gaming, teach them that it's not all shooters and horror, but actually really wonderful immersive stories and worlds into which they and their friends can participate. The whole industry can benefit."

Adds Cecil: "Yes, only the BBC can do this – and it might put a few people's noses out of joint and turn things on their head a bit given that it's free. But most importantly I think this can redefine what people expect of a computer game in terms of its story and really prioritise narrative as a part of the medium. That can only be a good thing."

■ *There's much more online. Head to www.develop-online.net for our full Q&As with Steven Moffat, Piers Wenger and Anwen Aspen; behind-the-scenes comments from the design team; an interview with BBC Vision's Simon Nelson; and a discussion of the differences between writing for games and TV with Doctor Who scribe Phil Ford.*

DESIGNING THE DOCTOR

HE MAY BE a hero worthy of his own game, and the Doctor's character naturally pushes towards an adventure experience, but not without some challenges.

"The lynchpin of the Doctor's behaviour is that he solves problems with reason and discussion – that's a difficult game mechanic," says Sumo Digital's Sean Millard.

"So we have had to address how you convey the essence of that but not stunt the gameplay. Action is about him avoiding danger rather than fighting it."

Same goes for the Sonic Screwdriver, the Doctor's powerful skeleton key, another device that can ruin the best game designs by simply being too useful.

The answer there has been to just diminish its power slightly – at times it simply isn't up to the task of solving massive, life-threatening challenges that require lateral thinking in the game. "The sonic screwdriver is an all-powerful thing that can pull you out of any hole – but in a game you need consistent rules," says Cecil.

Cecil has likewise pushed to rationalise how the characters are presented on-screen. Instead of being super-realistic, they are stylised takes on the Doctor and his companion.

Actors Matt Smith and Karen Gillan have been filmed and rotoscoped for the production – not clad in detail-rich mocap suits. Explains Cecil: "We were very keen to make this stylised and shy away from hitting the Uncanny Valley. These are characters people will see as flesh and blood on the TV every weekend – our game has to complement that, not ruin it. We're not going for ultra-realism."

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Oxford Thinking

While it's famed University has allowed Oxfordshire to court an international reputation as a place of learning, the area is now becoming increasingly well regarded as a hub for video game development. **Will Freeman** spent time with the region's industry leaders to find out more…

Some of the key figures in Oxfordshire's game development sector discuss the region

What are the advantages of setting up a studio in Oxford and the surrounding area?

Mick Morris, Audiomotion: Audiomotion has been based in and around Oxford since the late nineties. Geographically we've always been around here, and any time we've considered relocating, we've always had to consider what we've got here. We have a lot of clients come over from across Europe and beyond, and they just love the city.

They love soaking up the culture, the architecture, the good restaurants; it's just got a lot going for it.

David Hawkins, Exient: I totally agree. I would say all the things about Oxford being a beautiful place with great culture are true, and its central location in the UK is great too, but if I'm honest I like just like living here. That was the main reason I set up here.

Gobion Rowlands, Red Redemption: On that note, the reality is that a lot of people who join us do just love the place when they visit initially. They want to live here, so they are happy to move to Oxford, and that really works for us. Also, it's near enough to London, but contained enough that you can walk or cycle to work.

Then there's the universities. Our partnerships with them is essential to what we do, and both Oxford and Oxford Brookes are very approachable, and very engaged with making the city dynamic.

Mike Montgomery, Lightning Fish: I'd say that's the same for us, even being based in nearby Banbury. The reason we chose Banbury is that's it's close to Oxford, but it's also because if you're employing staff and customers are coming and see you, the transport network is really good, in terms of the motorway and the rail connections.

Hugh Edwards, High Score: We definitely located in the Oxfordshire area because we're in the centre of Britain, but also because we're at the centre of where all the games companies are, excluding Scotland. We're only half-an-hour away from London and Banbury, and you're also very close to Southam, you're very close to Leamington, and you're really close to Oxford, where there's a real hub of lots of game companies. We like to be central because of that, and then we go to London to record, or travel to Europe, or do whatever else we need to do.

Torsten Reil, NaturalMotion: For me it's also about the ecosystem of companies that are here. It's a critical mass, and at some point you've got enough companies in an area so that it's more than just a good place to be or to live. It's at the point where, for example, we get our motion capture done with the Audiomotion guys here, just down the road, so it's really convenient.

> ***"There are very well established business networks, so if you need funding for a company this is one of the best places in Europe you can be to raise money."***
>
> Torsten Reil, Naturalmotion

We can meet up outside of work to discuss the industry and what is going on. That's really interesting and valuable, and goes beyond how nice a city is to live in.

So things are going well for the Oxfordshire development community?

Rowlands: There's been a seed change here. I've noticed from an external perspective on the nine years I've been in Oxford, that the number of games companies in or around has really reached that critical mass. It's just amazing how much has happened here, whereas people didn't think of Oxford as a place for game development a few years ago. They thought of Brighton or they'd refer to London. Oxford has really come up, I think.

Montgomery : I think you're right. Oxford wasn't really on the map about 15 years ago for game developers.

Morris: To reiterate, I think there's quite a nice social community. People have and do meet each other quite frequently outside of work, which is an important part of the relationships many of us share.

With the studios, tech, and service firms now present in Oxfordshire, is it fair to say that the area hosts an autonomous development community?

Edwards: I don't think it's a clique, but people tend to know one another because of the location.

Rowlands: A lot of companies here are very helpful with sharing ideas, contacts, and connections. There's a shared sense of where that can take us next.

Edwards: And it's the proximity that helps encourage that. It's human nature that if you can pop in your car and within five minutes you can meet someone in a pub there's a better chance of brainstorming and sharing ideas, rather than picking a provider who's far away in Dundee.

Morris: I think visitors are always quite surprised as well because they come and I can list the names of all the companies sitting here today, and others who aren't here like Vicon, who make all the motion capture equipment. There's all the products and services we all do, and our collective clients like Sony and EA and Microsoft. People just aren't aware that this hub exists, of game development and related products.

Hawkins: I'd say I use a lot of people who are local to here, but I don't use them just because they are local; I use them because they provide the best service to my company. I use them because they're the best, and they just happen to be local to me.

Oxfordshire is obviously famous for its universities. How has that helped?

Montgomery : The Universities are of course a pull in for studios.

Reil: We're a university spin-out company originally, so we just wouldn't be here without the University.

Rowlands: The central location helps again. It lets us reach beyond Oxford and Oxford Brookes, to a point where we've got a partnership with Portsmouth University, and we've got several teams of students there working on risky, related projects.

Reil: I think that it's fair to say that while the local universities are great for recruitment, at the end of the day you hire people who are appropriate, so we've hired people from Universities all over the country.

How are you supported by regional bodies here in Oxfordshire?

Rowlands: I have some real issues with some of the South Eastern agencies. There are some great organisations within that area, and the ones in and around Oxford are fine, but all of the other South East agencies always focus on London. I can understand that, but it does make things quite difficult. Up in the West Midlands they are very active and always getting involved with everyone, and you feel that with Oxford positioned as it is in the centre of the country you can be tied to the London regional bodies.

Reil: We just don't come across regional bodies, to be honest. We have no interaction, and quite frankly I don't think we need it. When it comes to government and regional help in n general we're reasonably – perhaps not sceptical – but we're not particularly keen. I wouldn't say that's the case for tax credits [laughter] but beyond that there's not much interaction that we require.

Hawkins: I would say that I'm a fairly purist capitalist and I don't believe in support unless it makes capitalism work better. There are all sorts of issues associated with what other countries and other nations are doing and we don't really get any support here at all. Other people here might be involved with support, but I don't have anything to do with it as I don't know what's available, apart from R&D tax credits.

> ***"I truly believe that we're at the start of something much bigger than where we are right now. There's a number of very strong companies locally."***
>
> David Hawkins, Exient

The universities have obviously attracted a number of parallel industries to the area. Has that meant you've founded it harder to attract new recruits?

Reil: I found it opened more opportunities, and that's definitely something about being in or near Oxford. There are very well established business networks, so if you need funding for a company this is one of the best places in Europe you can be to raise money.

Edwards: We're in a slightly different position as an audio company, but we certainly don't have to worry about recruitment. There are so many really good audio engineers and musicians in Oxford; it's a real hub for it, even in terms of bands and signed musicians from around here. From an industry perspective there's quite a focus on audio here, which means we have way more applications for work than we can possibly handle. From our position its great to be in Oxford for the very reason of the number of industries here.

WHO'S WHO

MICK MORRIS,
MD, AUDIOMOTION STUDIOS
Audiomotion's full performance motion capture and processing facility has been used across the game and film industries.
www.audiomotion.com

MIKE MONTGOMERY,
DEVELOPMENT DIRECTOR,
LIGHTNING FISH
Lightning Fish specialises in family orientated titles like recent *NewU* fitness games.
www.lightningfishgames.com

HUGH EDWARDS,
DIRECTOR, HIGH SCORE
Audio-outsourcing expert High Score has a wealth of experience in the game and broadcast sectors
www.high-score.com

TORSTEN REIL,
CEO, NATURALMOTION
NaturalMotion's suite of animation tools have been used by a huge number of high-profile game developers
www.naturalmotion.com

GOBION ROWLANDS,
CHAIRMAN, RED REDEMPTION
Red Redemption is the acclaimed indie behind the enviromentally conscious *Climate Challenge* series of games
www.red-redemption.com

DAVID HAWKINS,
MANAGING DIRECTOR, EXIENT
Exient made its name creating sports titles for handhelds, and increasingly frequently, console platforms.
www.exient.net

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Exient is an award winning, independent developer in Oxford. Founded in 2000, they made their name working with EA on major sports franchises such as FIFA and Tiger Woods. Success driven by a high quality output has helped the company grow, and now Need for Speed and Activision's DJ Hero feature amongst their many achievements. With a vibrant social atmosphere, Exient is a great place to work for any upcoming industry super-stars. Ask yourself this - do you have the Exient-Factor?

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What challenges specific to this region do developers and related companies currently face?
Hawkins: Cost of living is one of the big challenges really, so you have to offer salaries that account for that. It's expensive to buy a property in Oxford. That said, the surrounding area isn't too bad at all.

> ***"There's a great talent base here and a great reputation building up. I'd love to see more start-ups here, and more across the industry if I'm honest."***
>
> Mick Morris, Audiomotion

Hugh: One thing we found when we were starting out was that people didn't really know anything about Oxfordshire and it's industry, and we were continually having to explain why we were based here and not in London. As our reputation grew, and the other companies here grews that stopped being a problem.
Reil: Finding office space in Oxford that's big enough to grow a company can also be hard.

And how about your staff retention? Is that easy?
Morris: Like most of us here, we've only lost a couple of staff members in all the years we've been doing it. Again, it's the positives about the place. People do just like it when they settle, and don't feel the need to move on.
Rowlands: The area's social element is more important than it sounds too. There's that whole 'Oxford geek' network going on, and lots of little really useful little social groups of that kind, and people get very embedded in that culture.
Morris: The extension of that is that on the odd occasion when people move from company to company within our industry, as we all know each other personally, it's never really a biggie.

The relationships we all have certainly make it very easy and amicable, and even if you are loosing a member of staff and they're going to a new home in the same sector, from a professional perspective everything is usually cool.

The term 'critical mass' has been mentioned more than once. Is there the capacity for more companies in Oxfordshire?
Morris: I think there's room for more, certainly. There's a great talent base here and a great reputation building up. I'd love to see more start-ups here, and more across the industry if I'm honest.
Montgomery : I completely agree. The more companies you have locally, the more people you can attract in; not only staff but also customers. If you're a publisher in the States would you rather go to Oxfordshire and see ten developers, or go to somewhere of a similar size and see two?
Hawkins: I truly believe that we're at the start of something much bigger than where we are right now. There's a number of very strong companies locally that have already seeded the area and as time goes on invariably certain people employed in the region will decide to do something else, and that's brilliant. That will spur more companies to form. The minimum standard we've got here, which is very high, will continue with that growth.
Rowlands: There's a real diversity of companies here as well, with many different angles on the computer games industry, which will really help.
Edward: Exactly. It isn't only game developers here; you've got all of the support structure too, with audio companies, motion capture companies, video companies and so on. They're all growing at the same rate, so as new developers come in everything is building. I don't see that stopping.
Reil: Also the industry is changing, as we all know, so while part of it is attracting publishers and publisher funding, but now there are also the independent companies publishing their own IP, particularly on digital distribution platforms like the iPhone. I would say in terms of growth that's probably the biggest opportunity now for Oxford.

AUDIOMOTION

YEAR FOUNDED:
1997
LOCATION:
OXFORD
KEY STAFF:
Mick Morris (Managing Director), Brian Mitchell (OD)
PREVIOUS PROJECTS:
Alien Vs Predator, DJ Hero, Guitar Hero World Tour, Killzone 2
CURRENT PROJECTS:
TBA

CONTACT
www.audiomotion.com
info@audiomotion.com
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As one of Oxford's longest standing video game service providers, Audiomotion Studios' facility offers one of the most advanced performance capture studios in the world.

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Recent projects have included *Killzone 2, PES 2010, Harry Potter, DJ Hero, Operation Flashpoint* and *Dead to Rights*. Meanwhile high-profile cinema releases such as *Watchmen* and *Clash of the Titans* have also taken advantage of Audiomotion's capabilities.

"We can offer a complete capture service from planning, casting through to final execution," reveals managing director Mick Morris. "A very high number of cameras and level of expertise is required - we don't know of any studios in Europe able to record face, body and fingers of four performers at once. If necessary we can put a smaller rig of cameras in a sound booth or in a clients studio to record face only."

LIGHTNING FISH

YEAR FOUNDED:
2008
LOCATION:
BANBURY
KEY STAFF:
Simon Prytherch (CEO), Mike Montgomery (Development Director), David Hunt (Chief Technology Officer), Phil Marley (Creative Director), Steve Dietz (Art Director)
Nick Court (Senior Project Manager)
PREVIOUS PROJECTS:
NewU Fitness First Personal Trainer, NewU Fitness First Mind, Body, Yoga & Pilates Workout
CURRENT PROJECTS:
TBA

CONTACT
www.lightningfishgames.com
TEL: +44 (0) 1295 817666

Formed by industry veterans Simon Prytherch, Mike Montgomery and David Hunt in 2008, Lightning Fish has already built a name for itself with the *NewU Fitness First* exercise games for the Wii.

Having established a studio mission to develop family-oriented games that have a positive effect on customer's lives through social interaction, Lightning Fish is already at work on a new, unnamed fitness title.

The Banbury developer has its own studio for video shooting, which it intends to make full use of for all of its future titles, and suite of proprietary tech in the fields of motion tracking and video/graphic integration, which it put to full use for the NewU games.

Lightning Fish is an advocate of the small team development model, preferring to keep number at or below ten. This approach is balanced by simultaneously using scalable external development with outsourcing partners and contractors.

HIGH SCORE PRODUCTIONS

YEAR FOUNDED:
2004
LOCATION:
BANBURY
KEY STAFF:
Hugh Edwards, (Director)
PREVIOUS PROJECTS:
Fallout 3, IL2 Sturmovik: Birds Of Prey, Lego Batman, Beijing 2008 Olympics
CURRENT PROJECTS:
TBA

CONTACT
www.high-score.co.uk
TEL: +44 (0) 1295 738337

High Score productions is an audio-outsourcing company based in Banbury, Oxfordshire that specialises in creating music, sound-design, voiceover and localised audio specifically for games. High Score has a permanent team of three and several regular contractors across its two studios.

High Score has worked for many large UK, European and American publishers and developers, including Eidos, Sega, EA, Activision, Rebellion, Oxygen, Blitz Games and 505 Games to name but a few – and believes that it always leaves a client satisfied.

Since the outfit's conception in 2004, the team has worked on over 70 game titles across all platforms such as PC, console, handheld and mobile, having originally worked in the television and film arena.

"We've been fortunate enough to have worked on some fabulous titles over the past few years and have a very large, ever-growing professional client-base," says director Hugh Edwards.

REBELLION

YEAR FOUNDED:
1992
LOCATION:
OXFORD
KEY STAFF:
Jason Kingsley, (CEO and Creative Director), Chris Kingsley, (CTO)
PREVIOUS PROJECTS:
Alien Vs. Predator franchise, Sniper Elite, Rouge Trooper
CURRENT PROJECTS:
TBA

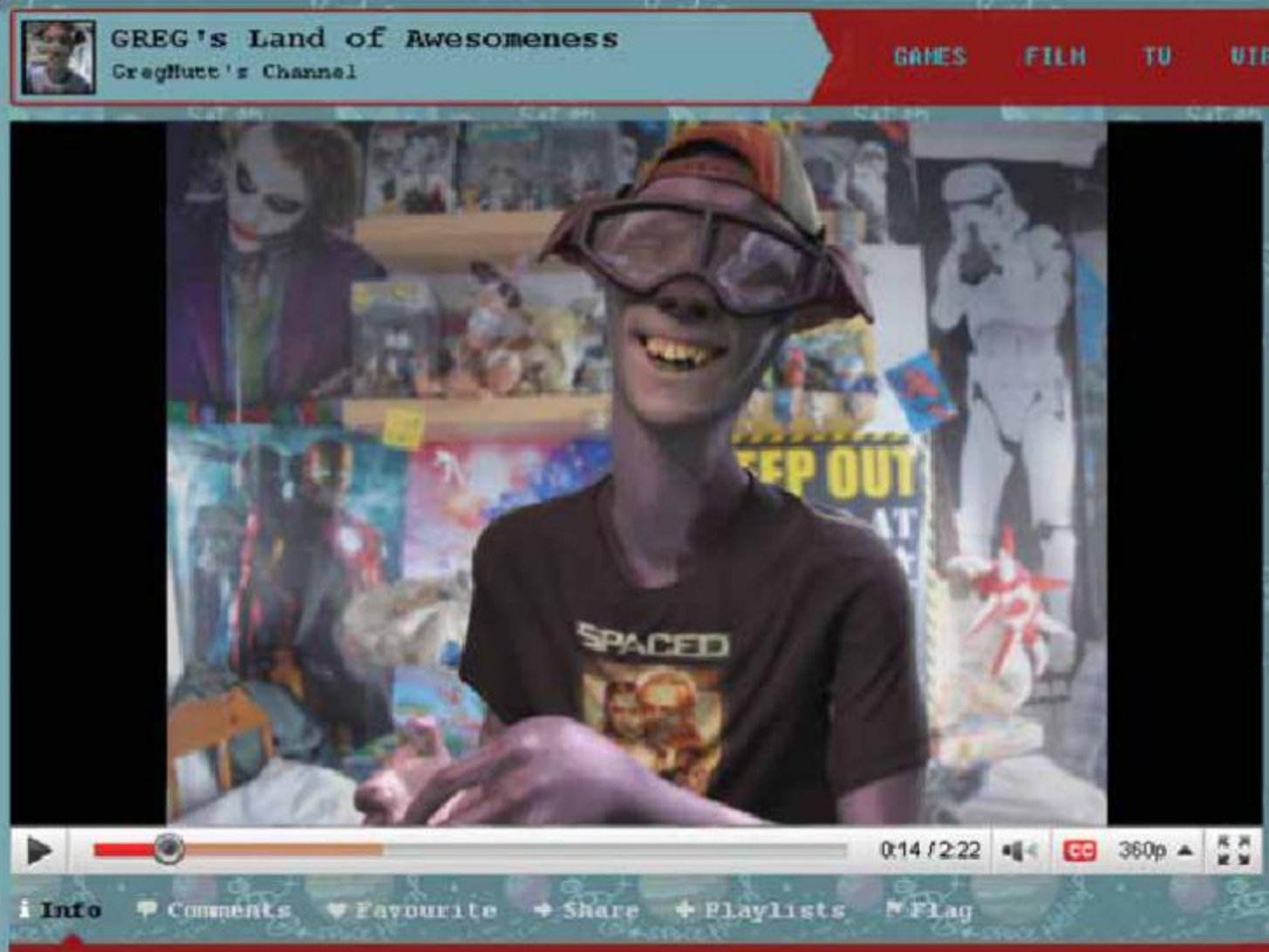
CONTACT
www.rebellion.co.uk
marketing@rebellion.co.uk
TEL: +44 (0) 1865 792201

Rebellion Developments is the video game studio of Rebellion, the Oxford based media company. It is best known for its *Alien Vs. Predator* licence, and for 2005's *Sniper Elite*.

Rebellion won the Develop Award for 'most improved studio' in 2006, as well as two BAFTA nominations for its *Rouge Trooper* title. The purchase of iconic British comics publisher 2000AD, coincidentally back in 2000, has opened up many new franchises for it to move in to over the past decade.

CEO Jason Kingsley attributes the company's successes to "continual focus on product quality and innovation."

Rebellion state that for the future they hope "to produce innovative video game products of the highest quality, to have solid links with comic, book and movie content to ultimately ensure that the final consumer experience is as exciting as possible."



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www.youtube.com/GregMutt
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Experience Points

In part two of our look into user experience testing and its place in the development process, Vertical Slice's **Graham McAllister** gives advice for optimal experiment design and execution…

The widely prasied world of Half-Life 2 was built with extensive experience testing

Last month we introduced the growing area of user research, and its key aim of improving game quality. This month we discuss a seven step process which will guide you through running your own user research sessions.

So how do we do this user research? Unfortunately there is no standard process which we can just simply apply, it will mainly depend on firstly identifying which questions you want to answer about the game, then choosing the right methods which help to get you those answers.

As a 'rough guide' to conducting user research, let's outline a process which could (and probably should) be used at each phase of game development.

1. What do you want to know?: Are you interested in testing the player's reaction to a new feature or control technique? Perhaps you want to compare different versions of the build? It may even be the case that you don't know; you just want to keep an open mind and see what a player's first reaction is to your game.

2. Design the study: This stage is of critical importance. Choosing the methods you're going to use will dictate the data you'll have to analyse later on. If you haven't captured the correct data, you may not be able to answer your original questions. Some of the most commonly used methods are:

Focus Groups: These are ideal at the start of projects, even before any code is written. They involve open discussion with groups of players, and are most useful for brainstorming and getting feedback to questions such as, 'which features would players expect from a game of a specific genre?' or 'How would you expect to control a game which used this type of controller?'

■ Advantage: They can help to inform a design direction and save costs by perhaps not creating unwanted features.

■ Disadvantage: Can be difficult to include all people in the discussion equally.

Observation: This involves directly watching the player interact with the game. You could be in the same room, or observe them remotely with video cameras or through a one-way mirror.

■ Advantage: A straightforward process to setup and run.

■ Disadvantages: If dev team are in the room, players are probably not at ease. Also, unless you're capturing the video data, if you don't observe an event, you've missed it.

> ***"When done correctly, user research should provide a moral boost to the team, strengthen the brand of the studio and deliver a high quality title."***

Group Playtest: Similar to observation, only with groups of players in the same room.

■ Advantage: You can increase the number of players you test your game with.

■ Disadvantages: With more players to observe, you may be missing more findings than you're seeing. Players also may influence each other consciously or unconsciously.

Think Aloud: This involves asking the player to talk out loud while they play the game, the aim being to get inside their thinking process 'in the moment'. You can talk to the player during or after the session as you wish.

■ Advantage: It reveals insights into the game that are otherwise difficult to capture.

■ Disadvantages: It may be unnatural for the player at first, talking about one's thinking process is not normal behaviour.

Post-analysis: In contrast to players talking whilst playing the game, you could get them to talk after the game session. By recording the game video, you can take a note of moments of interest during the test, then replay those sections and ask the player what they were thinking.

■ Advantage: This allows you to time gameplay sessions.

■ Disadvantage: The player may not perfectly recall how they felt at the exact moment.

Biometrics: Currently this represents the cutting-edge of understanding player's behaviour. One of the key problems with all of the above methods is that players may tell you what they think you want to hear, or give in to peer pressure. Biometrics is the science of capturing and analysing signals directly from the players body, the most commonly ones used in game user research are GSR (skin response or sweat), ECG (heart rate), EMG (muscle movement) and EEG (the brain's electrical activity).

■ Advantage: Can help reveal a player's physiological state and the player experience.

■ Disadvantages: The sensors need to be attached to the player which may not feel natural at first. Also, a player's body signals are unique, and so you need to baseline each player before the test begins.

There are many methods that can be used to deliver each of these approaches. As choosing the right methods is critical to the quality the results, user research is typically conducted by those with research degrees (Masters or PhD's). If this stage isn't done correctly, then the results may be in question.

Finally, once the experiment is designed, do a dry run. Catch any design errors early.

3. Recruit the game players carefully: If you test with the wrong people, you're wasting everyone's time. Some guidelines: do not use friends, family, and especially not colleagues, as they are more likely to tell you what you want to hear, or already know too much about the game. Also, pay them: users are more likely to provide quality information if they feel their feedback is valued.

Finally, do not re-use people. In most cases you'll want to capture the users' first thoughts and reaction, and this is lost if you re-use. However, you may want to bring players back

Heatmaps helped Bungie hone the Halo 3 multiplayer maps to perfection

for studies over longer periods of time or when comparing between builds.

Don't always think that testing with more players is better. Focus on the what you want to know and choose the number of players accordingly. For example if you want rich qualitative data, then testing with eight to 12 people may be enough. As a rough guideline, once you start seeing the same findings starting to re-appear, you've probably tested with enough players.

4. Conduct the playtests: By this stage the player is in the test lab and you've briefed them on what they're about to do and what's expected from them. This is where the majority of data is captured. As a minimum you should take notes, preferably time-stamped, but you may also wish to take video of the game, the player's face and body position, the buttons they are pushing, audio and biometric data from their body. It would be advisable for at least two people to run the study, one to interact with the player and another to focus on note taking.

5. Analyse the data: There are two main ways to analyse the findings – quantitative and qualitative – and it's usually not an either/or approach; it's both. Quantitative is probably the place to start: for example, if eight out of ten players had difficulty with a key feature of the game, then you should examine that in more detail. This is where qualitative analysis comes in, which will help say why those eight players had difficulty. Quantitative approaches may include time taken to complete a level, number of deaths/kills/restarts or number of times the player had to ask for help.

Qualitative analysis will typically mean meticulously going back through all recordings to explain why players where experiencing difficulty.

6. Write the report: This doesn't have to be a formal report; you can just send out a brief e-mail after each day's user testing and follow it up with more substantial detail. For quantitative-driven reports a spreadsheet may be the most useful way of reporting the results, but a more traditional report with annotated screenshots or links to videos may be more suitable.

Depending on the data you are trying to represent, other forms of data visualisation might be more effective, such as heatmaps as used by the *Halo 3* and *Half-Life 2* developers.

7. Communicate findings and take action: Make sure that the entire team is informed of the results and show evidence of them. If you have video data then use that. It's difficult to argue on the design of a contentious feature when video evidence shows that no one can figure out how it works. Communication with the whole team is critical as this is the stage that enhances the game quality.

This process is only a guide: within each stage there is a minefield of further techniques which can be used to help deliver the best results. In terms of when to do user research, starting early and iterating often offers the best chance for improving quality and reducing development costs.

The economics of games are changing. With episodic gaming likely to become more popular and downloadable demos available, buyers can sample fragments of your game and if the experience is not what they expect, the majority of a game's revenue potential may be lost.

Something to consider: how much would you pay to increase the quality of your game rating by one percent? How about ten per cent? With the average cost of a game going up to around $28 million, this puts the total cost of user research on a title at around 0.1 per cent of the budget.

When done correctly, user research should provide a morale boost to the team, strengthen the brand of the studio and publisher and perhaps most importantly, help to increase sales and deliver a high quality title.

www.verticalslice.co.uk

Dr Graham McAllister is the director of Vertical Slice, the first UK company to focus specifically on video game usability. He is a senior lecturer in human-computer interaction at the University of Sussex and is also an Apple Distinguished Educator.

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Call to Action

Last month we revealed former EA exec and now InstantAction CEO Louis Castle is keynoting July's Develop Conference. **Stuart Richardson** spoke to him to find out more about how digital distribution is reshaping games development…

You announced the new InstantAction Platform at GDC. What's the thinking behind it?
Video games are increasingly being played online, but fundamentally the distribution model of games and content is flawed. We ask customers to pay large amounts of money on sight-unseen products and wait hours to download it online. Or they're stuck with a game they had to pay full price for at a big retailer.

From the game creators' perspective, the retailers use their volume to limit publishers' revenue, and rentals and used game sales are making it very difficult to publish new games. Meanwhile they're not giving consumers an optimal experience. The games industry still hasn't suffered the disruption the internet has caused most other industries. So we see a huge opportunity to change that.

Do you see online platforms like this as an alternative to purchasing hard-copies of games, or the successor to it?
I see it as a natural evolution, just as MP3s followed CDs, which followed cassettes. The internet is an incredibly efficient way to reach new customers where they already are online, and to communicate directly with them rather than through intermediaries. Online platforms are part of an inevitable trend whereby the business side of games is aligning with how games are increasingly being played.

Do you see any major current or future issues with users downloading or streaming games?
Download times are still a barrier to consumer adoption, but this will become less and less of an issue as broadband technology and access improves. One of our biggest priorities is to tackle the issue of download times, and we're doing it through a combination of existing technologies which puts games down on a player's system 100 times faster than ever before, so he or she can start playing in just a couple of minutes.

Players get incredibly fast access to the full game – the full game version, not a demo version. The technology we're using is:

■ InstantAction's in-browser technology, which we've had for years, but until now we only applied to our own games. This is our core technology developed over the past three years. It's patented, and no one else has it. It gives consumers the ability to run a game through a browser as a native game – full access to the game, peripherals, hard drive, full power of your GPU.

■ Progressive download chunking technology that brings down onto the consumer's computer just enough of the game to run. It lets the customer start playing a game while the rest of it continues to download in the background.

■ Thin-client technology, through partners like Gaikai.

What existing games or franchises would you most like to see available on your platform?
Everything. The beautiful thing about the IA platform is that it's compatible with all games - from casual to MMOs to the iconicnames and titles.

What benefits do you think this platform offers over others available, such as OnLive?
For consumers, there are two benefits over our competitors: **ownership** and **sharing**.

■ **Ownership:** InstantAction has no subscription or rental fees – we do not ask consumers to pay forever for the same game. We offer free trials and pay-as-you-go, and once you've paid for the game, you own it.

With systems like OnLive, you're always renting the game, whether you have a subscription fee or you're paying by the minute (and in OnLive's case it's both). My team jokes that OnLive equals money for nothing and your games aren't free. Selling big demos equals money for something that used to be free.

■ **Sharing:** The InstantAction platform allows customers to email games to their friends just like they would any simple link, and easily invite others to play in the same way they'd share pictures or videos. They can actually embed and play the game directly in their own blog, Facebook, MySpace or other favorite social network pages and share the action with their entire friends list.

For game creators, the major benefits are broader distribution and customer access.

■ **Distribution:** Because the InstantAction platform allows anyone to embed any game anywhere on the web in the same way you'd embed a YouTube video, game creators can place their games where consumers go, rather than needing their consumers to go to the games.

This is revolutionary – the ability to embed a game anywhere means consumers can play a game inside a Facebook page, a review site or on a fan site, which means consumers discover games through their friends and on other sites they visit. By expanding access to games across the web, InstantAction is helping game creators find a different kind of audience and a wider base of users.

■ **Customer access:** Game creators get to stay in control of their customers using advanced metrics and analytics to know how their game is performing in the channel at all times in terms of customer acquisition and monetisation.

Why have you included the 'rent-to-own' transaction model for platform games?
Consumers don't have to pay the whole price at once and instead pay as they play. This matches all other forms of online media and we feel it is where the market must get to at some point.

Importantly, we're giving game creators the same revenue share on our rent-to-own model, making it a risk-free proposal for consumers and creators.

What has attracted you to talk at the Develop conference this year?
I was very excited when I was asked to speak. With the launch of InstantAction and the release of one of our as-of-yet unannounced games, it was the perfect time to talk about where I think the industry is and where we are all going. It's a very exciting time full of great opportunity and I can't wait to share my enthusiasm with the group of talented developers at the Develop conference.

Louis Castle sees online games distribution as the natural evolution from hard-copy sales

SPEAKER'S CORNER

Castle isn't the only one speaking at the Develop Conference this summer, which runs from July 13th to 15th at the Hilton Metropole Hotel in Brighton. This lot below are also speaking at the event. Keep checking www.devleop-online.net for speaker interviews and profiles. More info on the conference can be found at www.developconference.com.

Adam Levinson, Director of Central Audio, Activision **(Keynote)**
David Helgason, CEO, Unity Technologies **(Keynote)**
Shahram Izadi, Researcher, Microsoft
Jason Avent, Game Director, Black Rock Studios
Ben Board, European Developer Account Manager, Microsoft
Chris Bruce, Sony Computer Entertainment Europe
John Dennis, Design Manager, Team 17
Andrew Eades, Co-founder, Relentless Software
Paul Flanagan, Executive in Residence, Ariadne Capital
Jerome Hagen, User Research Engineer, Microsoft
Peter Hall, Principle Programmer, Crytek
Mick Hocking, Senior Group Studio Director, Sony Computer Entertainment Europe
Shahram Izadi, Researcher, Microsoft
Jon Lee, Technical Director, BTV
Ben Minto, Audio Director, EA DICE
Peter Molyneux, Creative Director MGS Europe, Lionhead/Microsoft
Jasper Koning, Game Designer, Ronimo Games
Simon Oliver, Founder, Hand Circus
Alice Taylor, Commissioning Editor, Channel 4
Gary Taylor, Audio Manager, Sony Computer Entertainment Europe
Susan Tunstall, Business Development Manger, BTV
Alan Yu, VP of Artist & Repertoire, ngmoco

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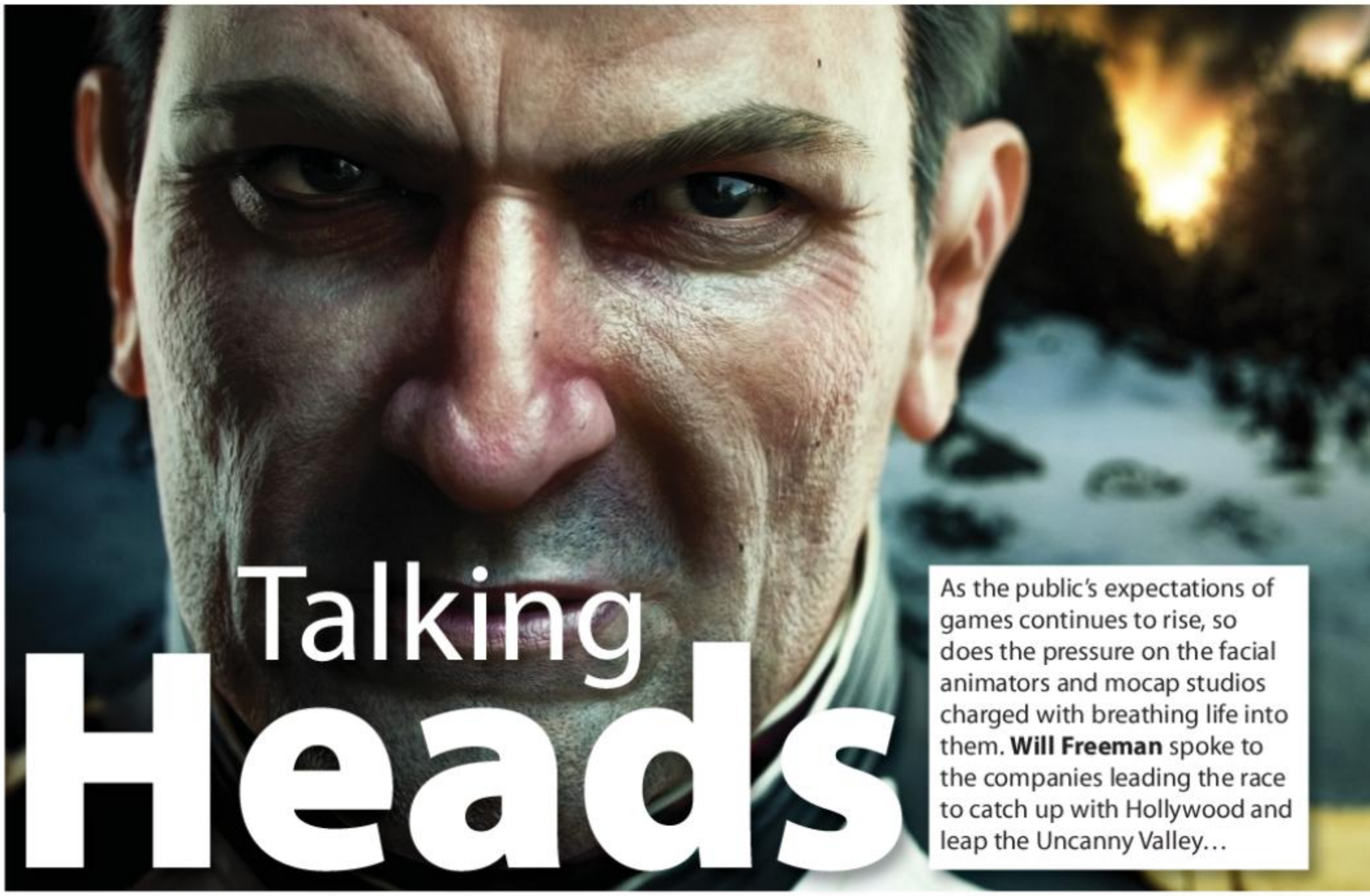
The good, the bad and the ugly

Facial animators are poised at the edge of the Uncanny Valley, but which side are they on? p46



Talking Heads

As the public's expectations of games continues to rise, so does the pressure on the facial animators and mocap studios charged with breathing life into them. **Will Freeman** spoke to the companies leading the race to catch up with Hollywood and leap the Uncanny Valley…

Across the game development industry most disciplines are advancing at a great rate, all the time propelled Moore's infamous Law. The momentum needed to satisfy public thirst for new tech magic takes a huge effort, but expectations are consistently met.

The exception to that trend is in the facial animation and motion capture sector, where the threat of falling into the Uncanny Valley looms large. New technology and techniques exist in ample quantities, but the closer the sector moves to delivering convincing human movement, the more potent flaws become.

Facial animation and motion capture is a field still in a fledgling stage, where numerous approaches thrive. Each has merits and failings, from audio-driven models and traditional marker-based performance capture to video capture and painstaking hand animation.

Regardless, the facial animation market alone is enormous, and growing all the time.

According to data provided by Image Metrics, in 2006 the sector was worth some $807 million worldwide. Thanks to the growth of the number of movies and games requiring the same tech, that market is expected to be worth a quite staggering $1.9 billion in 2011. While film accounts for much of that sum, in 2010 games promise to offer facial animation companies $150 million in business.

It is clear that there are plenty of developers keen to include high-end facial animation and mocapped performance in their projects, and a public hungry for the results. The real challenge, then, is not in building a market, but adopting the right technology and technique to guarantee the best results.

While some models offer memory cheap, expedient and low-cost solutions, others deliver expensive, headline-grabbing quality that tempts gushing reviews and the subsequent sales boost.

"In my opinion, entirely automated facial capture is still unrealistic on most medium scale jobs," suggests Ian Jones of director RealtimeUK, which works with a number of motion capture firms to create pre-rendered game trailers and marketing movies.

> ***"How the data is captured is secondary to providing a well planned film-like shoot and delivering a high quality result."***
>
> John Klepper, Imagination Studios

"They accomplished it on *Avatar*, but it took literally years to get to the stage where raw data could be plugged straight into the facial rig with believable results.

"Although mocap data will get you fairly close the original performance, all the data that we have dealt with still requires a degree of artistic interpretation and those extra little tweaks that really bring a character to life."

Spend any time with the staff at the studios leading developments in facial animation, and it's clear that many others echo Jones' sentiment that no single approach offers an ultimate and unbeatable solution. In short, choosing the right approach – or combination of approaches – for your budget and schedule is more important than plucking the technique that boasts the most technical muscle (see: '*Guess Who*').

FACE FACTS

"When using motion capture verses hand animating, how the data is captured is secondary to providing a well planned film-like shoot and delivering a high quality result on time, and on budget. Today there are so many good methods of tech," confirms Imagination Studios MD John Klepper

"The difference is in time spent, attention to detail, and skill in data handling post shoot, coupled with support during and after delivery. Most of the time our clients are battling with extremely tight deadlines, and a technology that won't offer the fast turnaround they need just won't do the job. For a recent triple-A title, for instance, we produced over 20,000 seconds of body and face animation, fully edited, in less than two months."

The demands of Klepper's client base are typical of those facing facial animators, and are the driving force behind the evolution of the technology in the field. An apparent pioneer spirit is clear when talking to the likes of Image Metrics, Imagination Studios and

FaceFX's audio-based facial animation tech (right) has been used in over 100 titles

Audiomotion, and its evident that energy is leading to a wealth of research and development and experimentation.

Oliver Bao, head of research at Depth Analysis, which is currently at work on Rockstar's thriller *LA Noire*, has a driver's eye view of where facial animation is heading, and is quick to point to the hurdles it faces.

"A real challenge facing facial animation right now is getting really high quality normal maps and them actually performing realistically," he professes. "I know that my peers in the industry have been trying to do video framerate captures, with all the high-res normal maps, but keeping all that stable, and the stereo correspondence of the geometry in place, and the temporal correspondence; that's quite difficult."

BROUGHT TO A HEAD

The challenges facing the facial animation and mocap studios are certainly plentiful, and as service providers have to a cater for a continually more diverse and increasingly demanding range of customers, there's an emerging need across the sector to greet clients with not only a barrage of information, but a simple honesty that hammers home a message that those who sign the cheques rarely like to hear.

"The real challenge is staying adaptive to the needs of the individual client and working within their constantly evolving pipeline, and ever-limiting timeline," reveals Klepper. "That and convincing potential clients that, as clichéd as it may seem to say, with so many inexpensive solutions available today; you get what you pay for."

Yet even the notion that more money equals better quality doesn't quite cover every intricacy, and subsequently there's still plenty of space for the more traditional creative disciplines. While that sounds like good news for those schooled in long standing techniques, such as hand animation, the constant pressure of budget means that like so many other skills, the work is being handled in markets where more generous economies mean less troublesome overheads.

"Aside from the costs involved, in either the infrastructure in terms of hardware, or buying services, the increasing desire for more believable characters as a device for potential emotion content is driving people to chose hand animation from cheaper labour markets," suggests James Norman, lead mocap animator at Rocksteady.

Outsourcing will always court controversy and the odd sly glance, but in reality it is a means to an ends, and has provided developers with a vast and skilled new pool of staff. Such is the burden placed on those charged with bringing a humanity to modern games, that an international effort may be the only way to meet the market needs.

> ***"A real challenge facing facial animation right now is getting really high quality normal maps and them actually performing realistically ."***
>
> Oliver Bao, Depth Analysis

If that weren't enough, there's also a collective responsibility not just to perfect techniques, approaches and business models, but to push the ability of facial animators even further.

FACING FORWARD

"Catching up with the expectations of the public in terms of graphics and visuals is something the game industry is still struggling with," warns Klepper. "Games are judged nowadays in terms of presentation as much as content and tech, so ignoring the ever increasing demand for high quality graphics and animation is not something developers can afford to do anymore."

It isn't all negative though, as the capacity for innovation within facial animation and mocap far outweighs the challenges.

"I think that as game engines and the power of consoles increase in the next few years it can only go to allow, or necessitate extremely high resolution capture, where every muscle twitch and deformation can be remapped at run time," muses Norman, who paints an exciting picture of the future.

"As this happens perhaps there may come a time where we should go back to the Valley and step right across. There's certainly a trend to try to get players more emotionally involved with the gaming experience and one way to do this is to create situations or encounters that are believable enough to draw one in."

THERE'S NO EYE IN TEAM

With the other side of the Uncanny Valley clearly occupying the minds of even the most pessimistic observers, there's an encouraging trend that is contrary to what might be expected of a discipline defined by competing technologies. Collaboration and cooperation are buzzwords in the sector, and almost every high profile firm in the field has warm things to say about its rivals, and some kind of deal with a 'competitor'.

Xsens has partnered Image Metrics, the latter of which is hugely enthusiastic about FaceFX's work. Elsewhere RealtimeUK has worked closely with Audiomotion to establish a flexible production pipeline to develop an internal piece called Samurai.

Full performance capture underway at Audiomotion's facility

Killzone 2 has taken advantage of the sector's willingness to collaborate on projects

"It's a small group of companies, and we still haven't solved 100 per cent of the problems in facial animation," admits Image Metrics CEO Michael Starkenburg. "So until somebody comes along and does solve everything we need to work together a little. To be honest with you I think that's the same in most of the game production fields. We're all trying to solve the same problems for the same people.

"Furthermore, it's not a space where winner takes all. It's not like one guy wins and the other guy looses. In fact we're often working on the very same projects, so the more that we cooperate together, the better it will be for our clients."

Like many of its contemporaries, Image Metrics is continually building partnerships with companies that might be seen as rivals,

> ***"I think that Uncanny Valley issues will get more pronounced rather than less as the rendering technology gets much better."***
>
> Michael Starkenburg, Image Metrics

and additionally, it is extending its collaborations to other areas of game development. Its deal recently with localisation experts Babel provides a case in point. In fact, the entire facial animation and motion capture ecosystem is evolving through those kind of alliances.

It's also apparent that the developers making use of facial animation services are set to gain from the sector's willingness to collaborate, as FaceFX's co-founder and CEO Doug Perkowski explains: "Lots of our clients are using multiple facial animation techniques on the same project.

"Audio-based technology forms the base-line approach, and important animations are hand-tweaked or authored with performance capture or mocap technologies. In many cases, our competitor's data is loaded back into FaceFX to play in-game. So we are starting to see the various facial animation technologies as something complementary rather than competitive."

"Using good specialists in whatever approach decided on is very important – we will always try and work with the best expertise we can from that point of view whether that means our own in house capabilities or working with external specialist contractors," adds Richard Scott, managing director of Axis Animation.

BRIDGING THE GAP

Regardless of who you may choose to work with, and what extra help you can pull in at home or abroad, the famed Uncanny Valley conceived by roboticist Masahiro Mori in 1970 still presents a pertinent point which facial animators must cross. Whether we're past that theoretical trough is a point of fierce debate.

"We're absolutely there if you want to spend enough money," proposes Starkenburg. "Look at a film like Benjamin Button, and there's no question that it's past it. There's not a second in that movie where the illusion drops away.

"We're at the point where with a certain amount of staff and a certain amount to spend you can tell a story that is completely unencumbered by technology. What we need to do now is democratise crossing the Uncanny Valley. We're working with all kinds of people who are trying to do that kind of thing in commercials and games. We're never going to have 'Cameron-sized' budgets, which is why we're focused on a value proposition that will see quality rise and costs fall."

If the Image Metrics CEO's diagnosis is correct, the next big challenge for facial animation tech providers in the games industry is making crossing the Uncanny Valley affordable. However, not everyone shares Starkenburg's optimism.

"It only really starts becoming a big issue once you are pushing render fidelity to a point where things are believably real and I think game technology still has a few years to go before it gets to that point," opines Scott. "As such I think that Uncanny Valley issues will get more pronounced rather than less as the rendering technology gets much better."

If that is the case then gamers may have to endure the odd rubbery smile and vacant glare for a few years more. With so much of the human brain dedicated to reading and processing the face even the slightest discrepancy will always be noticed. One solution, that James Cameron clearly made use of, was avoiding a distinctly human form.

"It seems to me that placing as near as we currently can to human face motion onto a face character face that isn't trying to be photorealistic can produce some very pleasing results," says Norman. "We certainly find ourselves operating in this area at Rocksteady, where the Batman world characters, in the forthcoming sequel to *Batman: Arkham Asylum*, are human but beautifully stylised."

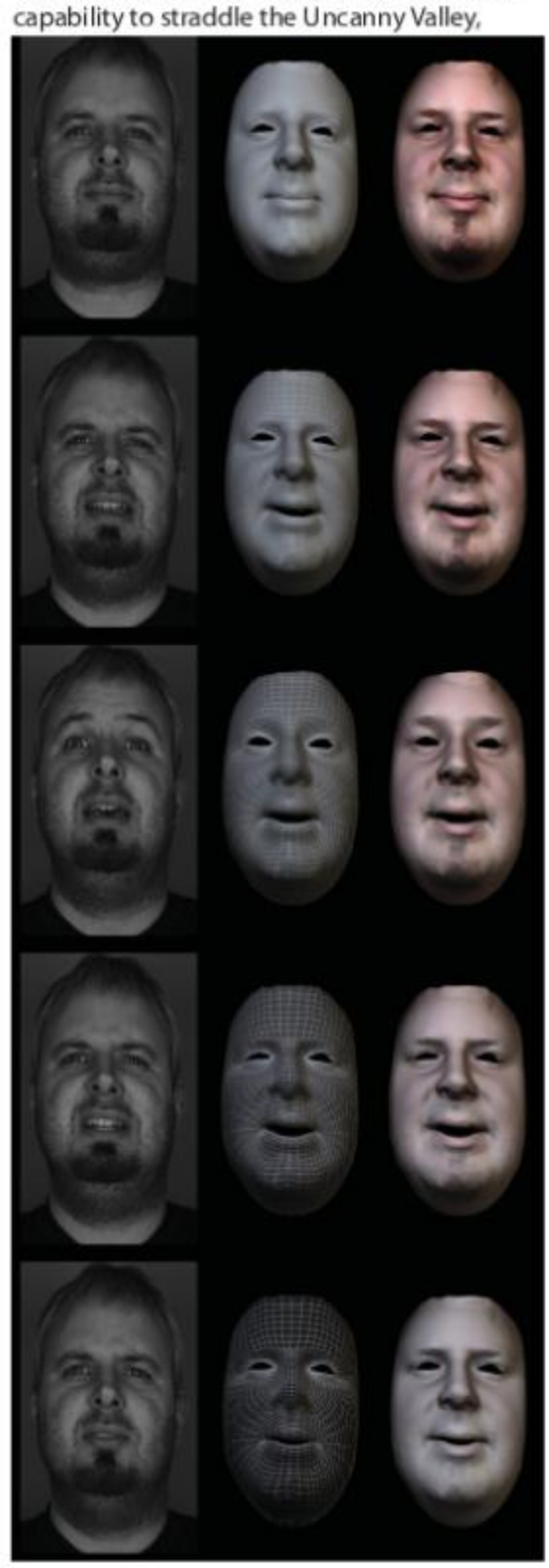
Creative thinking is all well and good, but a monster lurks in the Uncanny Valley that is just as powerful as that of financial budget; namely memory limitation. Even with a coffer as generous as Cameron's, game developers will always be a slave to data capacity, as Klepper highlights.

"At the moment, the main limitation holding back games is the overall file size. Realism lies in subtle details, and the added layer of animation data and model boosts – for example wrinkle maps – needed to achieve this spark of life is also data expensive. As methods of compression evolve and console games are no longer limited in file size with installation to hard drive and multiple DVDs, we'll see games getting closer and closer to true realism."

"I don't believe anyone in the games industry – using in-game engines – has truly beaten the Uncanny Valley yet," adds Jones. "All the most emotive and sympathetic characters out there still tend to have that tiny degree of stylisation. They all sit on that narrow edge just before the terrible drop into that unforgiving valley."

"I would say we are just approaching the Uncanny Valley rather than emerging from it," agrees Perkowski. "In any case, while it's important to create demonstrations that push the boundaries of technology, the more important question is 'how real can we make an animation when we don't have unlimited time and resources devoted to it?'. When we have a good answer to that question we can increase realism across the entire spectrum of video games."

Even in a theoretical place where games makers have the technological and financial capability to straddle the Uncanny Valley,



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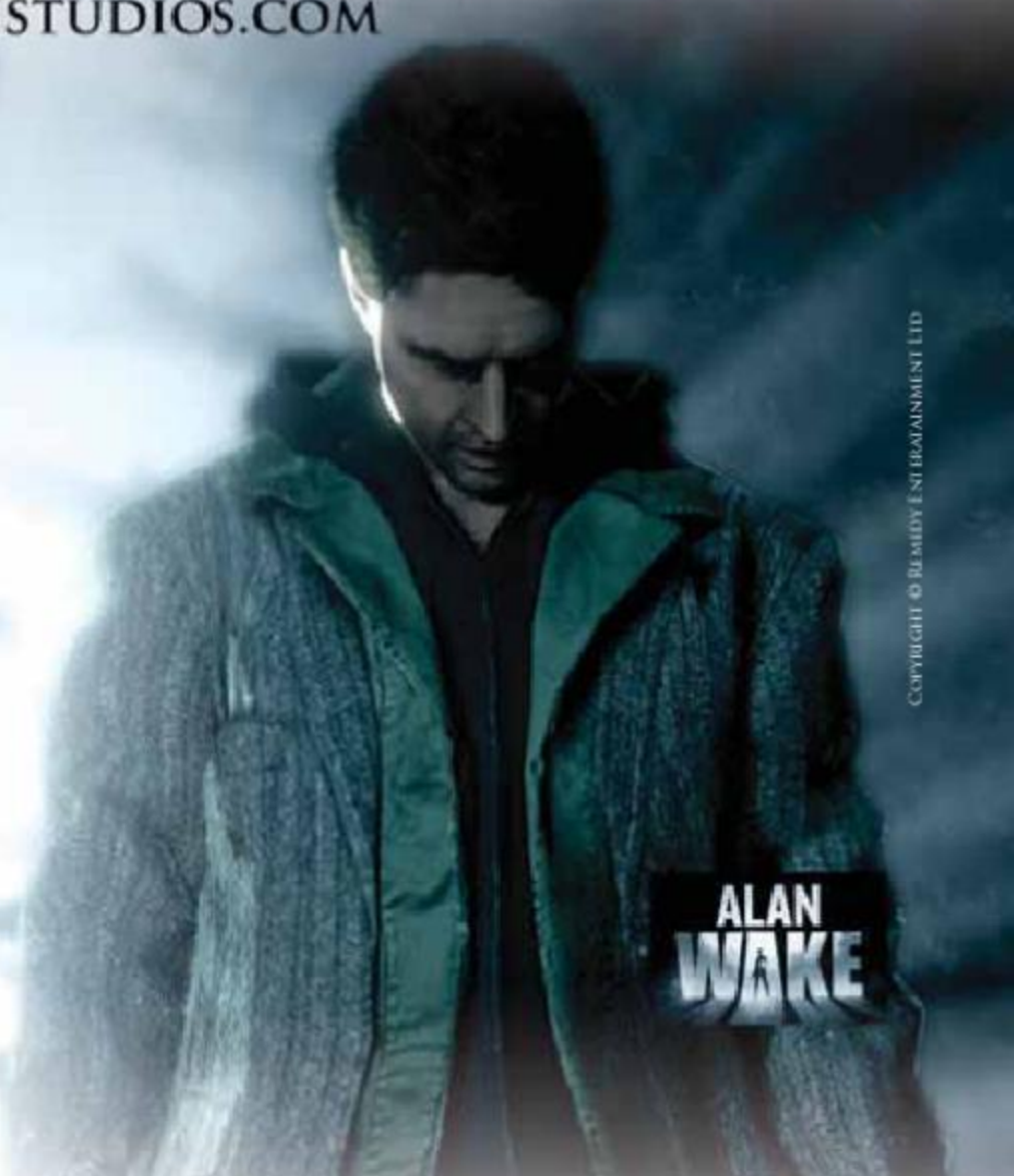

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CUBIC
motion

Assassin's Creed II combines the work of numerous facial animation and mocap studios

there's another barrier to cross that presents perhaps more of a obstacle.

STAGE FRIGHT

No matter how realistically lips twitch and cheeks stretch, companies are increasingly expected to deliver performances that are believable. With so many movement capture techniques there are real people under the markers and suits, and increasingly directing those actors is as much a skill as the working with the technology in place.

Side is a firm that specialises in performance as part of the service, and has cast and directed actors on numerous projects using a number of different facial capture methods.

"All have their own advantages and disadvantages," declares Side's managing director Andy Emery. "Marker-based capture works extremely well when a lot of movement is required for full performance capture, whereas video based capture works well in a controlled environment and with large volumes of lines. The most important thing with any shoot is to ensure you cast the right actor, they know exactly what to expect in the session and they are well directed.

"It's very easy to create a facial shoot pipeline that is 'technically' great but inadvertently create one that is a barrier to a great performance."

Emery isn't alone in his opinions, and even the most sizeable facial animation specialists are aware that there's plenty to learn from our friends in Hollywood.

"Beyond just the technology, the industry has so much to learn about how to cast and write, which is so much part of the future of good facial animation," suggests Image Metrics' Starkenburg.

MOVING FORWARD

As if sitting in the canvas of a director's chair doesn't offer enough extra work, facial animators and mocappers also have another issue to wrangle with. In short, there are two factors to realism; appearance and movement. Striking a balance between the two, and choosing which warrants more weight, is not as easy as it sounds, and when combined with other factors like virtual cinematography, the task in hand becomes an immense one.

"A lot of the trick to selling animation and mocap as reality is actually in the context in which it is shown," insists RealtimeUK's Jones. "Many of our most convincing pieces use realistic environments, lighting and true to life camera work. We build a situation in which the animation is strongly supported by the visual direction of the movie."

EXPRESS YOURSELF

An extended tour of the world's leading facial animation and mocap studios unveils a sector wrestling with a number of dichotomies, as alternative theories, creative approaches and technologies compliment and contradict one another continually.

Those employed in the field must learn to juggle the minefield of issues at the same time as picking up a new skill; storytelling.

"A major challenge for the sector is that people are still getting away with bad work," concludes Starkenburg. "People are still saying 'I'll do facial animation so I can sell more games'. That's a very short-sighted approach. In the long run, we have to solve this problem.

> ***"The most important thing with any shoot is to ensure that you cast the right actor, they know exactly what to expect in the session and they are well directed."***
>
> Andy Emery, Side

"Even if a game sells 100,000 more because it has great facial animation, that's still short-term thinking. In the long term the expectations of consumers are going up, and we're going to need to be able to tell stories at a level that the consumer wants to see. That's the real challenge for the industry."

Mastering the art of storytelling and directing is no mean feat when facial animators and mocappers are also charged with pushing technolgical advances so close to the cutting edge that they must trick the human eye and overcome a theoretical problem that has evaded scientists for a full four-decades.

And yet still, the sector is awash with innovation, and the public is increasingly falling for its charms. Facial animators have every reason to express optimism.

BEYOND THE UNCANNY VALLEY OF THE DOLLS

AS 40-YEAR-OLD theories go, the concept of the Uncanny Valley still courts substantial academic weight. Yet the term, originally conceived to apply to robotics design, might not quite have the scope to contain facial animation and mocap. In fact, the industry may be able to side step over the famed chasm all together.

"We've got realism aplenty," says Audiomotion director Mick Morris, when asked if the Uncanny Valley has been bridged. "We are capturing realism every single day of the week.

"I think Quantic Dream did a nice job with *Heavy Rain* however I do wonder about the whole Uncanny Valley theory. Even Cameron detoured with *Avatar* by going with human-esque characters. Aren't we in pursuit of a little fantasy, a little escapism, rather than trying so hard to traverse the Uncanny Valley?"

Morris isn't alone in questioning the relevance of the Uncanny Valley. While it clearly remains a benchmark of quality for all the companies striving to bring humanity to games, according to Axis Animation's managing director Richard Scott there is a more immediate issue.

"Games currently have a simpler problem which is about getting better drama and performances on screen – that has more to do with writing, moving away from the 'direction by committee' approach and understanding acting and actors than technology," suggests Scott.

"If you look at films, a huge chunk of the budget is about getting a performance on screen, and at the moment the character performance aspect in games needs more priority on how to actually achieve that, if it wants to get closer. A lot of this has just as much to do with the logistics and production management side as it does about technical processes."

Audiomotion's Youtube sensation Greg Mutt (above), and it's FPC area in use (left)

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GUESS WHO

With so many companies from both the game and film industry offering facial animation and motion capture services, it can be hard to keep up. Here Develop offers an overview of the lead companies in a crowded sector.

AUDIOMOTION
Service: Audiomotion's state-of-the-art facility caters for full performance capture, meaning up to four actors' faces, fingers, full-body and final audio are simultaneously recorded.
Recent projects: *Killzone 2, Guitar Hero: World Tour, Alien Vs Predator*
Web: www.audiomotion.com
Email: info@audiomotion.com
Tel: (0) 141 572 2802

AXIS
Service: Axis specialises in producing intros, trailers and cut scenes that range from full blown pre-rendered sequences to working directly with client realtime engines.
Recent projects: *Split/Second, Mass Effect 2, Killzone 2*
Web: www.axisanimation.com
Email: enquiries@axisanimation.com
Tel: (0) 141 572 2808

DEPTH ANALYSIS
Service: Depth Analysis' new MotionScan 3D motion capture tech is designed to streamline post-production processing time and budgets
Recent projects: *LA Noire*
Web: www.depthanalysis.com
Email: info@depthanalysis.com
Tel: +61(0)2 8569 2800

DIMENSIONAL IMAGING
Service: Dimensional Imaging provides high-end 3D and '4D' image capture scanners and transfer tech that applies the images to customers geometry quickly.
Recent clients: Valve
Web: www.di3d.com
Email: info@di3d.com
Tel: (0) 141 585 6481

FACEFX
Service: FaceFX offers an audio-based facial animation solution that uses a recorded sound file of an actors voice and an optional text transcription.
Recent projects: *Metro 2033, Mass Effect 2, Assassin's Creed II*
Web: www.facefx.com
Email: info@oc3ent.com
Tel: (919) 727-9624

IMAGE METRICS
Service: Image Metrics video capture tech is marker free and flexible, meaning the firm can cater for budgets large and small
Recent projects: *Napoleon: Total War, Assassin's Creed II, NBA 2K10*
Web: www.image-metrics.com
Email: Via web
Tel: (0) 161 242 1800

IMAGINATION STUDIOS
Service: Imagination Studios provides a full range of services, from pre-production to final render and export to engine, including keyframe animation, performance capture with high face animation and eye tracking.
Recent projects: *Battlefield: Bad Company 2, Alan Wake*
Web: www.imaginationstudios.com
Email: info@imaginationstudios.com
Tel: +46 (0)18 - 10 6930

REALTIMEUK
Service: RealtimeUK works closely with a number of motion capture studios to produce pre-rendered game trailers and marketing movies.
Recent projects: *DJ Hero, Split/Second, Napoleon: Total War*
Web: www.realtimeuk.com
Email: info@realtimeuk.com
Tel: (0) 207 830 9310

SIDE
Service: Side's area of focus is casting and directing actors to provide believable performances, giving it a distinct perspective on facial animation and motion capture.
Recent projects: *Fable III, Star Wars: The Old Republic*
Web: www.side.com
Email: info@side.com
Tel: (0) 20 7631 4800

XSENS
Service: Xsens' camera-free, marker-free MVN Motion Capture solution consists of inertial sensors attached to the body by a Lycra suit, making the tech flexible and portable
Recent projects: Borderlands, Killzone 2
Web: www.xsens.com
Email: info@xsens.com
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HEARD ABOUT

Dead to Rights: Retribution

John Broomhall talks to audio manager and composer Matt Black and lead audio designer Richard Blackley about creating a coherent audio mix by design…

DEVELOPER:
Volatile Games

PUBLISHER:
Namcom Bandai Games

AUDIO TEAM:
Audio Manager/Composer: Matt Black
Lead Audio Designer: Richard Blackley

Dead to Rights: Retribution is a Noir-ish ground-up reinvention of the classic franchise in which you experience the origins of vice cop Jack Slate and his faithful, albeit deadly, canine sidekick. There's fighting a-plenty with 'seamlessly integrated combat' allowing you to freely switch between gunplay, brawling and use of your AI mutt, Shadow.

Audio-wise, it's quite simply the largest production undertaken by Mssrs Black and Blackley – in scope of content, size of team, supporting technology and budget, featuring as it does a cast of actors recorded in LA and a one-and-a-half hour music score, the orchestral aspects of which were laid down at the legendary Abbey Road Studios.

With the immensity of the task before them, the team chose to integrate the FMOD audio engine with extensive in-house world editor code. Sounds could be positioned in real-time while game-connected and relevant replay and DSP parameters tweaked with immediate in-game auditioning. Explains Blackley: "You don't really know if something works until you hear it in context so implementing sound live in the game really upped our productivity, and we were able to mix as we went along. We're using a lot of run-time DSP for environmental FX and also for creative FX like when the player's taking damage (we pretty much filter out everything).

"We have a system where a sound emitter can duck another sound emitter to create space (which works really well to say 'duck a helicopter when you're in a tunnel') and also a priority system for gunfights – when there's a lot of the same weapons being fired, it will cull foley and footsteps – less important quiet sounds which you won't miss – in favour of focusing on the guns with more clarity. I monitor in both surround and stereo on a Genelec setup – it's really important to 'QA' your own work throughout development."

Regarding the huge music composition task, Black is candid: "The scale of it was a bit daunting which is why I'm really pleased that overall, it holds together with consistency as a body of music throughout all the various character themes which players subliminally link with specific enemies.

"I started by talking to our publisher about music style and we compared notes using reference materials, which are vital, as not everyone shares the same language and terminology when discussing music. I made demos of key themes polishing them to a high standard ready for review and sign-off following which I fleshed out those themic directions making them into the actual pieces that would feature in the game.

> ***"It's really important to 'QA' your own work throughout development."***
>
> Richard Blackley, Volatile

"Then we set about the live recording. It was quite a challenging process but once you've established the area stylistically you want to work within and benchmarked the things you're aiming for musically, you get into a groove and it all starts to flow."

Strings and brass for 20 compositions were recorded at Abbey Road Studios during 12-hours of sessions but a smart approach and individual instrument mic-ing meant Black was subsequently able to re-purpose the resultant stems for further pieces with relative flexibility.

Back at base, he runs Cubase (with FX Teleport on a separate machine) leaning heavily on Quantum Leap instrument sets in combination with Stylus, Absynth soft synths as well as a Moog Voyager and Nord Lead 3, not to mention a Kaoss Pad into which he mashes and manipulates self-produced guitar loops.

All well and good, but the really great and notable thing that emerges in conversation with these guys is their thoughtful, careful and intelligent approach to the end mix. Why? Because in a game where combat is King and the soundscape is flooded with gunfire and helicopters, it's clear they considered and mitigated the ever-present danger of mix cacophony before a note of music was written or a single sound designed.

"We were determined right from the start to have a clean, uncluttered mix – we just didn't want the audio to be busy all the time fatiguing the player's ears. We talked about it a lot," says Blackley. "It's great to have a strong dialogue between the composer and sound designer with no egos in the way."

Adds Black: "There was also some consideration when composing and producing the music – making sure I wasn't taking up the frequency range with big guitars and drums."

Wall-to-wall music was ruled out as anathema. Instead, discussion took place about dynamic range, pacing of the audio and leaving space to get bigger with music in some areas whilst leaving ambience to colour others. Says Black: "We believe sound is as capable of story-telling as music and we certainly have that – especially where visuals fade to black and you can't see what's happening. The result is that there's never anywhere in the game where the soundtrack's too in-your-face or too crowded even though it's obviously action-packed."

John Broomhall is an independent audio director, consultant and content provider
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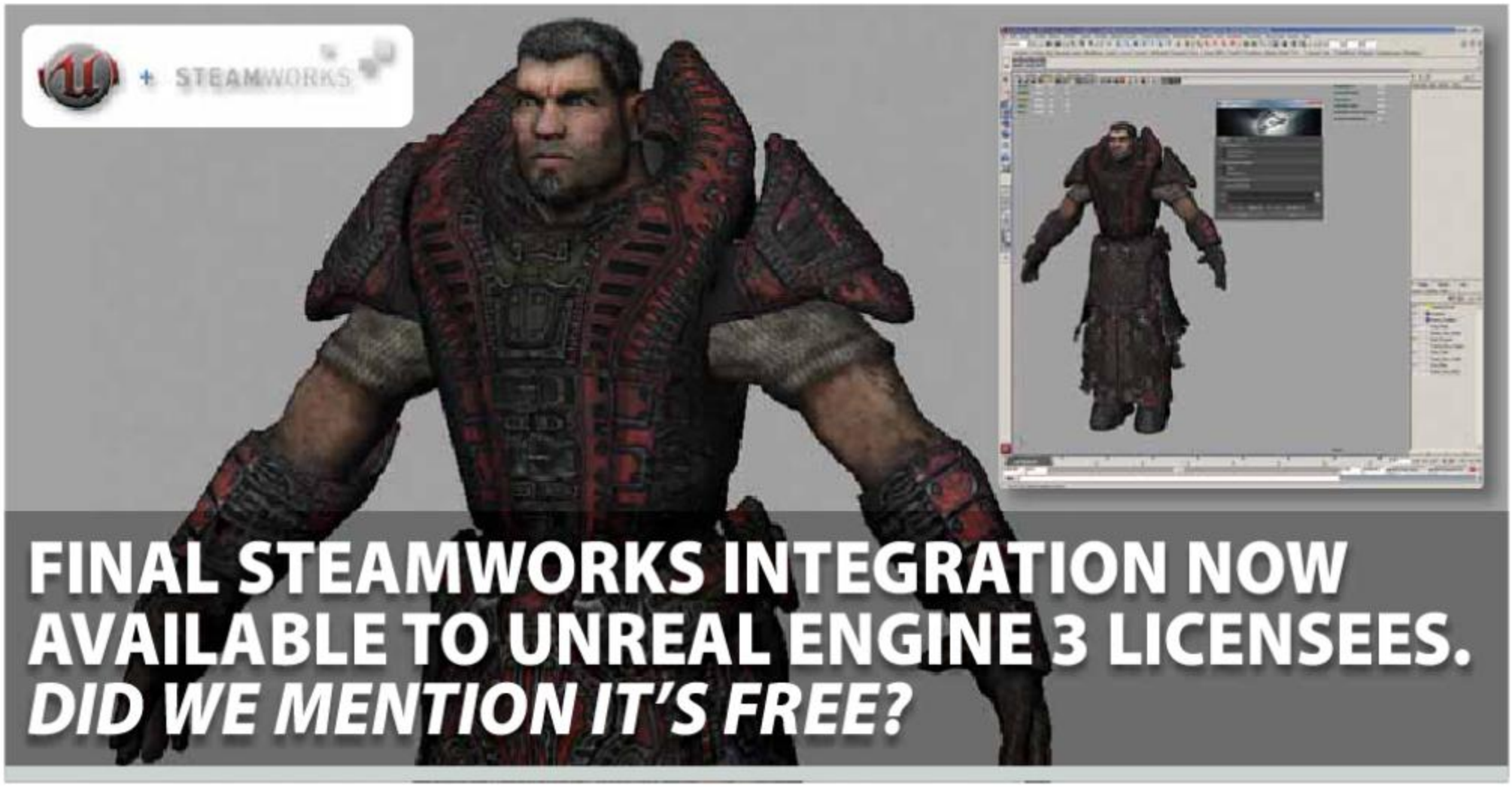
www.johnbroomhall.co.uk



FINAL STEAMWORKS INTEGRATION NOW AVAILABLE TO UNREAL ENGINE 3 LICENSEES. *DID WE MENTION IT'S FREE?*

Epic and Valve are teaming up to deliver Valve's Steamworks collection of services to anyone who has licensed Unreal Engine 3 for use in its products, free of any additional fees.

Everybody knows what an awesome distribution network Valve has created with Steam. The Steamworks suite provides developers with the tools to make their games closely integrated with the cool features offered on Steam. We're excited to be able to offer Steamworks integration to our customers as a standard part of Unreal Engine 3, free of charge. We're big fans of Steam and our games have been very successful on the platform so it was a no-brainer to bring Steamworks and Unreal together.

"Unreal is one of the most widely used engines in the industry, period, and it's been behind the scenes on some of the very best games created over the past 10 years, on all kinds of platforms," said Gabe Newell, co-founder and president of Valve. "It's an honour to have Steamworks included in the technology offered to all Unreal Engine 3 licensees. It's hard to think of any community of developers who could get more from all the services that come with Steamworks."

Steamworks is a complete suite of publishing and development tools that offers PC game developers and publishers access to the game features and services available through Steam. These include product key authentication, copy protection, auto-updating, social networking, matchmaking, anti-cheat technology and more. The features and services available in Steamworks are offered free of charge and may be used for both electronic and tangible versions of games. For more information on Steam, please visit www.steamgames.com.

AUTODESK'S FBX MAKES IMPORTING 3D CONTENT INTO UNREAL ENGINE 3 A ONE-CLICK PROCESS

Importing 3D content is now just one click away. Autodesk and Epic are now providing greater connectivity between Autodesk's art creation and animation tools and Epic's Unreal Engine 3, using Autodesk FBX data interchange technology. Autodesk FBX 2011 offers a faster, more streamlined workflow for transferring content created in Autodesk Maya 2011 and Autodesk 3ds Max 2011 software into Unreal Engine 3 – boosting production efficiency and preserving creative intent.

The streamlined interchange of 3D assets between Autodesk art creation tools and Unreal Engine 3 is the result of a long-standing, productive relationship between Autodesk and Epic.

The Autodesk FBX file format is a robust standard for rich 3D data exchange within the games community. With this streamlined workflow, FBX should be the first choice for developers using our powerful Unreal Engine 3 when it comes to transferring art from Autodesk software.

New for Unreal Engine 3 licensees and Unreal Development Kit (UDK) users is an FBX importer that enables game developers to upload FBX files created in Maya or 3ds Max directly into the Unreal Editor. The importer automatically breaks files down into assets in the Unreal Editor, such as level of detail (LOD) information, animations, character meshes, character rigs and models. In addition, if a 3D model is updated in 3ds Max or Maya, a new FBX file can simply be imported into the Unreal Editor where the assets will be automatically refreshed.

Marc Stevens, vice president of Autodesk Games, said: "We're really excited about our collaboration with Epic Games. We've teamed up to provide greater connectivity between art creation tools, animation tools and middleware from Autodesk, and Epic's Unreal Engine. This is made possible through advances in Autodesk FBX data interchange technology and better integration of our middleware into the Unreal Engine. In short, our combined efforts are aimed at giving game developers a faster, easier, more streamlined workflow that boosts production efficiency and preserves their creative intent."

Autodesk FBX makes transferring Maya and 3ds Max content to the UE3 easy

UPCOMING EPIC ATTENDED EVENTS:

Triangle Game Conference
Raleigh, NC
April 7th to April 8th, 2010

E3 2010
Los Angeles, CA
June 15th to June 17th, 2010

Please email: mrein@epicgames.com for appointments.

To discuss anything raised in this column or general licensing opportunities for Epic Games' *Unreal* engine, contact: **mrein@epicgames.com**

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Mark Rein is vice president of Epic Games based in Raleigh, North Carolina. Since 1992 Mark has worked on Epic's licensing and publishing deals, business development, public relations, academic relations, marketing and business operations.
www.epicgames.com

UNITYFOCUS

A preview of Unity 3

With the summer release of Unity 3 just months away, **Thomas Grové** details some of the key features in place to make work with the engine more efficient, whatever the power of your target platform…

UNITY 3 WILL SHIP THIS SUMMER
PRE-ORDER TO GET A DISCOUNT AND ACCESS TO THE BETA

THE PAST year has seen some pretty amazing Unity releases: Unity 2.5 added Windows support and a completely customisable editor; Unity 2.6 ushered in the democratisation of game development by making the base version of Unity free for commercial use while adding support for external version control, performance profiling, and a state of the art animation editor.

Meanwhile, Unity iPhone 1.5 and Unity iPhone 1.6 were also released – bringing with them significant performance optimisations and features such as piracy protection, multiplayer networking, and GPS support.

In parallel to these developments, Unity engineers have been quietly working on what was internally referred to as the 'mega merge'; Unity Wii and Unity iPhone began their lives as branches of Unity 2.1 – now they're finding their way back into the core version of Unity.

That means that Unity Wii and Unity iPhone will benefit from the many improvements that have been introduced into Unity over the past year, as well as the features and improvements being added in Unity 3.

It also means that with Unity 3 you'll have one editor that deploys to all of Unity's target platforms: PC, Mac, Web, iPhone, iPad, Android, Wii, PS3, and Xbox 360.

For more information visit unity3d.com

WHAT'S NEW IN UNITY 3?

ONE OF Unity's strengths has always been its ability to run gracefully on older or less powerful hardware. Unity 3 adds features that really enable high production value projects to shine on high end PCs and consoles, but it also includes features and optimisations that allow Unity content to play better than ever on less powerful machines. The Unity 3.X roadmap has lots in store for it, but here is some of what was on display in the Unity booth at last month's GDC:

Foreign Language Text Support: Both in the Unity editor and in games. This might not sound like a mega feature for native English speakers, but if you have any aspiration to localise your game for different regions then this feature is pure gold. It will also allow Unity to become more widely adopted as a development platform in these other regions.

Full Debugger: Unity 3 introduces script debugging with MonoDevelop on both Windows and Mac. You can pause your game, do line-by-line single stepping, set breakpoints, and inspect variables. This is probably the feature that programmers have been pining for the most so I'm super excited that we're including it with this release.

Project Browser: When you're working with large projects you want to find your assets fast. Unity 3, adds a content browser which includes tagging and searching and shows everything with nice previews so you always have the assets you need at your fingertips.

Advanced Audio Features: Unity 3 brings reverb zones, filters, tracker file support, and a bunch of other goodies such as editable falloff curves for all major audio parameters. Reverb zones and falloff curves in particular were demonstrated in Unity's GDC booth via the Dark Unity example project (*above*).

Deferred Rendering: Another feature being shown in Dark Unity was a cutting-edge deferred rendering system. Deferred rendering allows you to have hundreds of real time point lights in your scene with only a marginal cost to performance. The same G-Buffers used for the lighting can also be reused for plenty of other high-end image effects without additional performance loss.

BEST-IN-CLASS MIDDLEWARE INTEGRATIONS:

Integrated Beast Lightmapper: We want your artwork to look its best so we licensed the best lightmapping technology. Beast is typically licensed at up to $90,000 per title, but we are including it with your Unity licence for free. Beast lightmaps interact beautifully with real-time dynamic lights; as objects come closer, Unity seamlessly fades to real-time lighting so you get full shading and bump details.

Integrated Umbra Occlusion Culling: Performance is your number one concern on mobile devices, but even on powerful hardware you want to pull off as much as possible. That's why we've licensed the number one occlusion culling system and integrated it into Unity. Best of all: instead of paying tens of thousands per title, it's included with your Unity licence at no extra charge.

DIRECTORY

The world's premier listing of games development studios, tools, outsourcing specialists, services and courses...

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Darren Barnett joins Stainless Games
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Substance Redux goes under the spotlight
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SERVICES:
Xloc unveils localisation tool 4.0
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KEY CONTACTS

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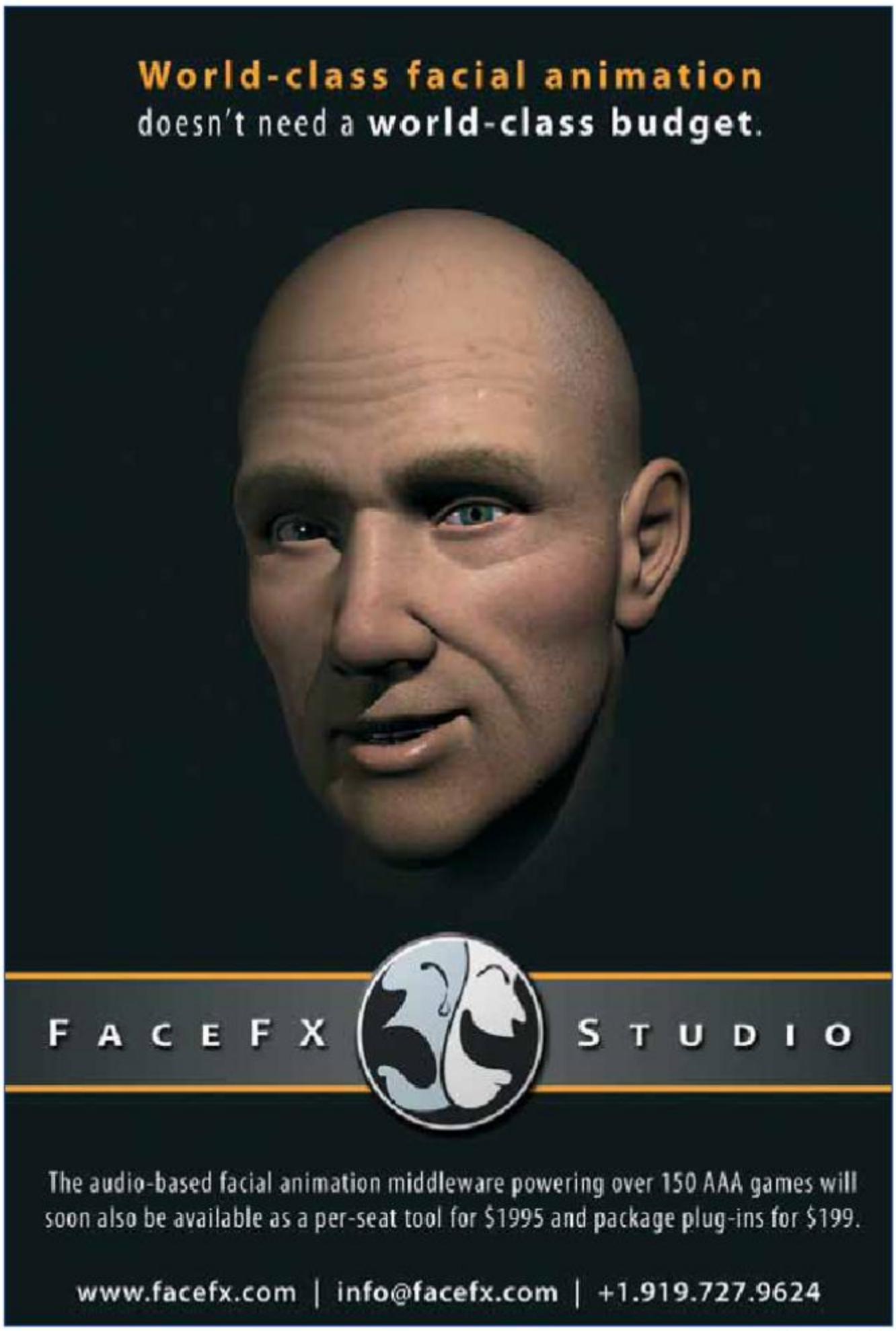
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Studio News

This month: Intent Media, Stainless and Eutechnyx

Alex Boucher and Stuart Richardson have joined **Develop**, the very brilliant magazine you now hold in your hands.

Alex (*right*) has joined the *Develop* team as the new sales executive, and will be supporting the current sales executive Katie Rawlings. He will be working across all facets of *Develop*, including print, online, *Develop 100* and the *Develop* Awards in Brighton.

He previously held sales roles at *The Independent* and Bauer, and boasts experience from a variety of roles in the entertainment sector.

Stuart (*above, far right*) has joined *Develop* as a staff writer. He will be working with the *Develop* editorial team to make sure that you (yes, you) will keep getting the very best coverage of the video games development industry possible.

Stuart previously worked freelance on a number of news websites, and served a brief and more than slightly odd stint as a cinema projectionist. He is an avid gamer and said that he is "over the moon to finally be working on something as excellent as *Develop*."

"Games are very much a way of life, and to be able to contribute to the games development industry in such a positive way is something I am very excited about," he added.

www.develop-online.net

Stainless Games is building up its senior management team with the hiring of ex-Eidos development director Darren Barnett.

At Eidos he worked on titles like Just Cause and franchises such as Tomb Raider and Hitman.

"Darren brings with him over 15 years of experience of working on triple-A titles. We're looking forward to him carrying forward that standard of work into increasingly ambitious console download titles," said Stainless Games production director Ben Gunstone.

Darren said of his move: "I've known Stainless since the Carmageddon days of the late 90s and have always thought they were a great team. The opportunity of working with old friends to combine my production and commercial experience in a hands-on role, in one of the most exciting market segments, was just too good to miss."

www.stainlessgames.com

Gateshead – based independent video game developer **Eutechnyx** has appointed Ed Martin as executive vice president, North America, as it continues a period of expansion.

Martin was previously a director at Electronic Arts for four years, where he was responsible for EA Sports' NASCAR franchise.

Prior to EA Sports, Martin was executive producer at Hasbro Interactive, which he joined from Papyrus, the legendary developer of PC auto racing simulations.

"When it comes to American racing games, Martin is the man. His experience and enthusiasm for the sport are absolutely second-to-none, and he's going to be an invaluable asset to Eutechnyx," said COO of Eutechnyx Darren Jobling.

Martin added of his move: "The passion and independence of Eutechnyx are incredibly exciting. I'm thrilled to become part of that team in what will no doubt be a defining year in our history."

press.eutechnyx.com

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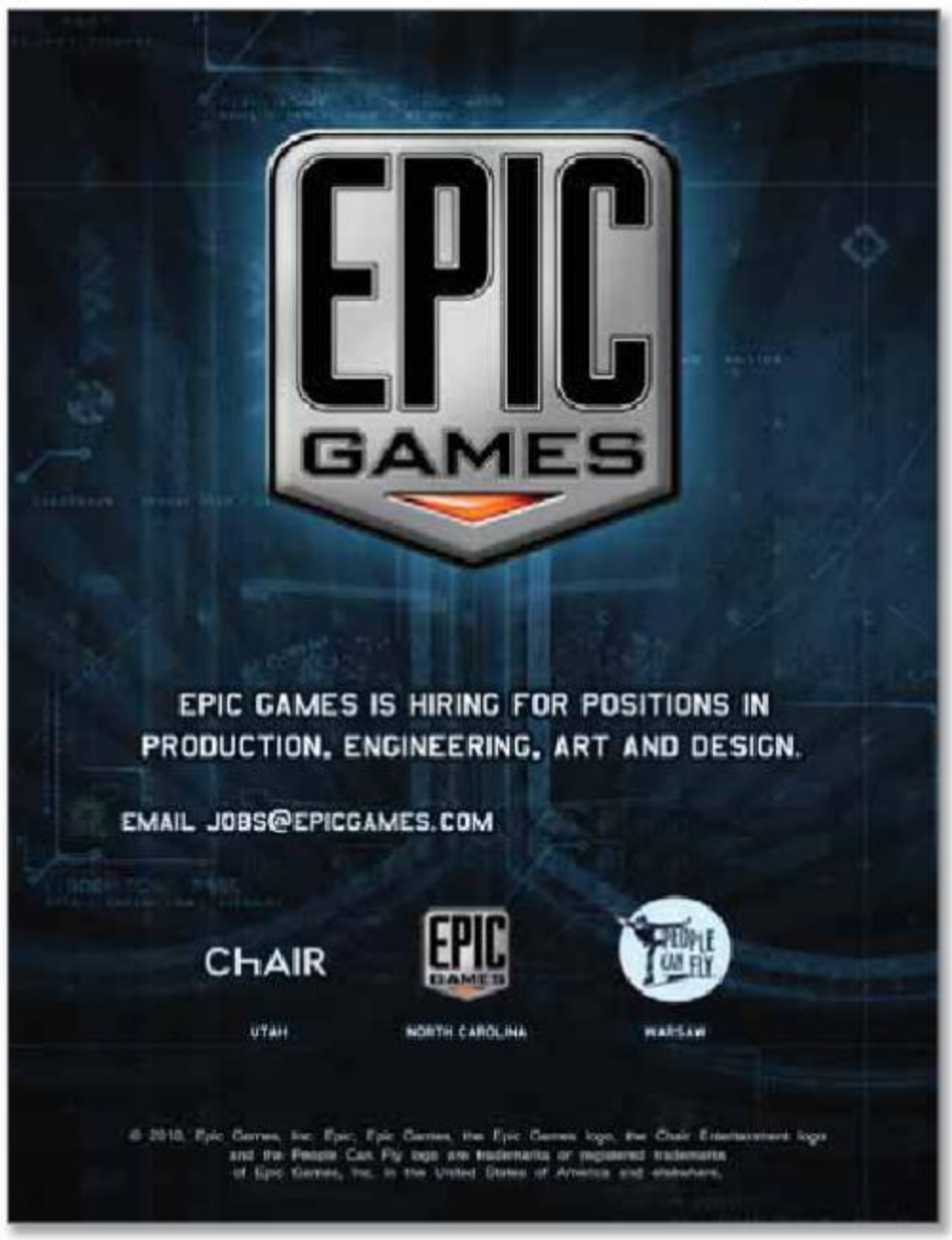

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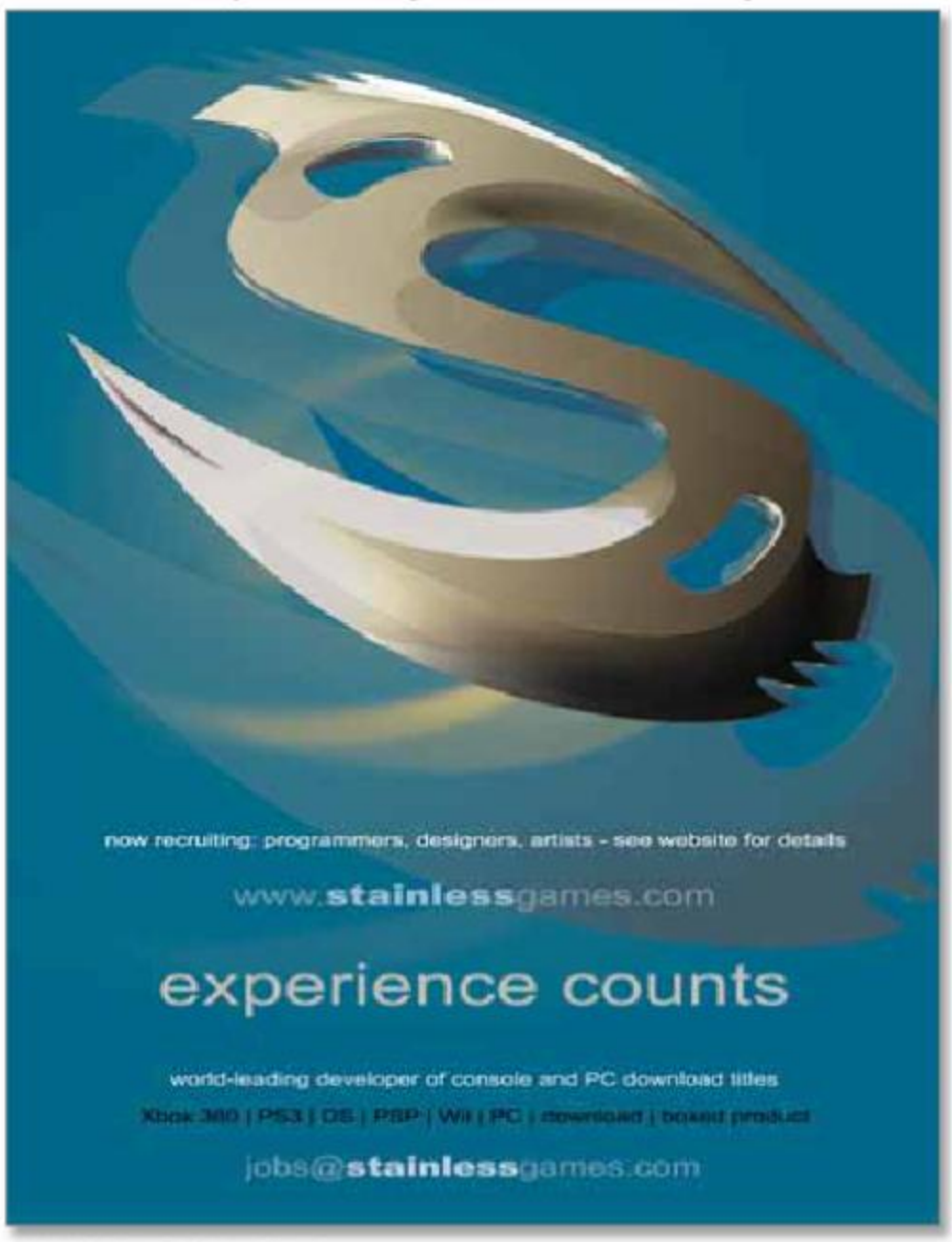
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Tools News

Mobile-friendly XNA 4.0 announced

Microsoft has given a first look at its new integrated online services for PC, 360 and mobiles. Called XNA 4.0, this is the latest edition of the firm's development toolset.

Version 4.0's central new feature is support for Windows Phone 7 Series, adding to its Xbox 360 and PC platforms.

Crucially, those platforms will be integrated within one another, according to a blog post from XNA lead program manager Michael Klucher.

"Through the Gamer Services API's you can pull in a user's Gamertag and 2D Avatar as part of the game experience, unlock achievements on the platform, and leverage notifications for asynchronous turn based gaming," he said.

Along with a cluster of graphical improvements, the XNA update also provides dynamic audio output as well as microphone input support.

4.0's additions include integrated Visual Studio 2010, a dynamic audio output and microphone input, and four partner tools for BasicEffect; namely SkinnedEffect, EnvironmentMapEffect, DualTextureEffect and AlphaTestEffect.

www.xna.com

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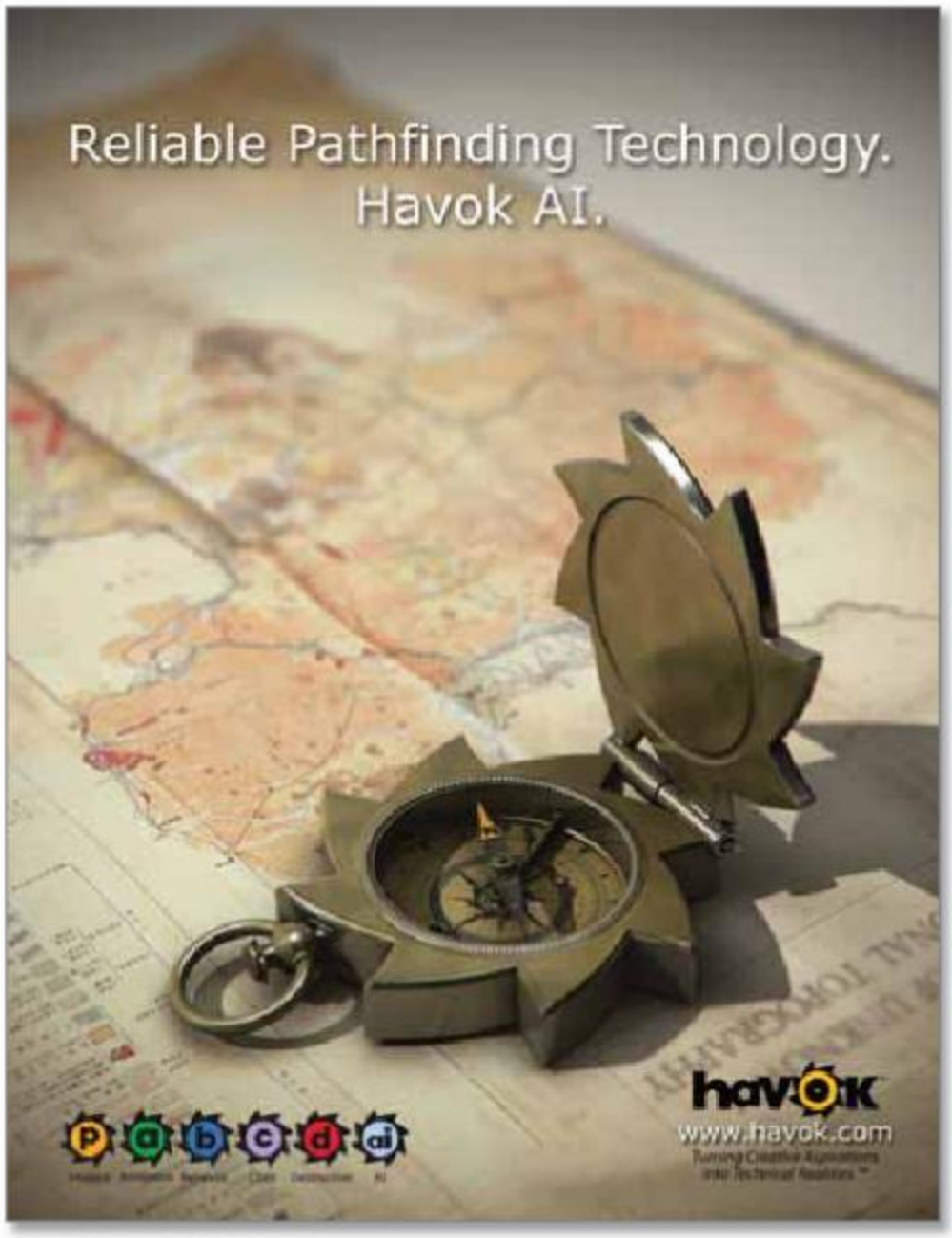


Tool Spotlight

ALLEGORITHMIC SUBSTANCE REDUX

Technology type: Tool

Middleware specialist Allegorithmic has released a new tool named Substance Redux, allowing developers to compress texture files late in the production pipeline, or even after an online game has been released to the public.

Substance Redux allows users to compress the size of relevant files by up to 50 per cent.

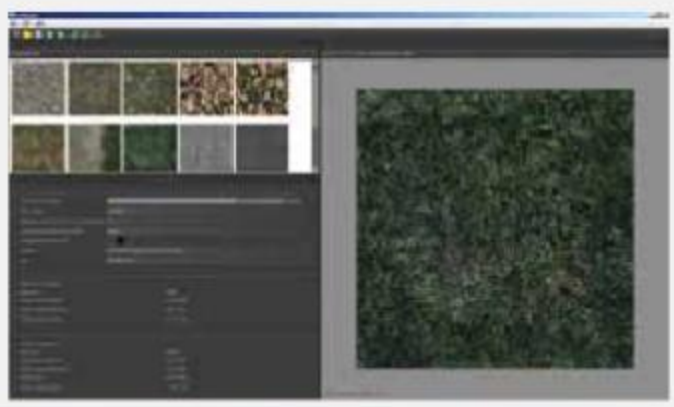
"Substance Redux, the first in an exciting new line of products from Allegorithmic, is an intuitive compression tool that users are able to easily integrate into existing pipelines and production realities," said president and founder of Allegorithmic Dr Sebastien Deguy. "Similar to a WinZip dedicated solely to online games, Substance Redux is a remarkably smart tool that will fundamentally change the way users reduce and compress textures."

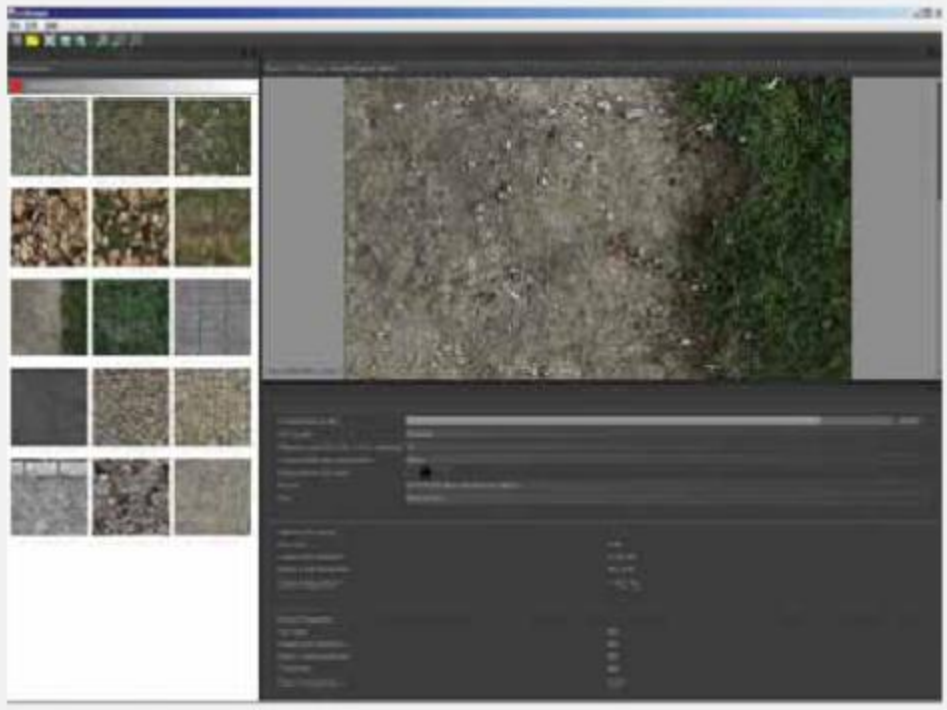
According to Allegorithmic's data, textures contribute to an average of 50 per cent of an online game's overall file size. Furthermore, total file size is reported to directly correlate with the financial success of an online game. In short, if the file size is too big many potential customers will either not complete the download of a given game, or never return once the download is concluded. The percentage of users that withdraw from playing the game during or immediately after a download is known as the 'abortion rate'.

"Often the abortion rate is as high as 90 per cent," said Deguy, speaking with *Develop*. "That means a huge loss in revenues effectively caused by file size."

Substance Redux allows for detailed texture map analysis and optimal compression schemes, the use of custom automatic filters to improve quality, extremely quick in-house DXT compression at runtime, and plugs-ins for Epic's Unreal Engine 3 and Emergent's Gamebryo engine.

www.allegorithmic.com





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Services News

Xloc unveils localisation management tool 4.0

Xloc detailed version 4.0 of its popular video game localisation management tool at GDC in San Francisco last month.

The customisable Xloc 4.0 system includes a number of new features, such as a specially crafted API for seamless integration of developers' tools and processes, support for over 200 file formats, and a range of enhanced and adaptable asset build features. The new version also boasts increased historical data for translations, and significantly expanded prototype build capabilities.

"Our core focus is to help our customers create high-quality localisations in less time and with lower cost than traditional methods. We continually update our solution to add features and elements that create a more valuable, streamlined and efficient localisation process," said co-founder and chief technical officer of Xloc Mason Deming.

"We are very excited to share these new capabilities with our current and future clients," he added.

Speaking to *Develop* at GDC, co-founder and production consultant Stephanie O'Malley Deming added: "What we really offer is a true boutique service, and we're proud of that. The fact is that while good localisation is data driven, it's also very much a creative process, and so there isn't a simple out of the box localisation management process. What we provide also really supports developer-led in-house localisation, which is something very important today."

Current and former Xloc clients include Activison, Capcom and 2K Games.

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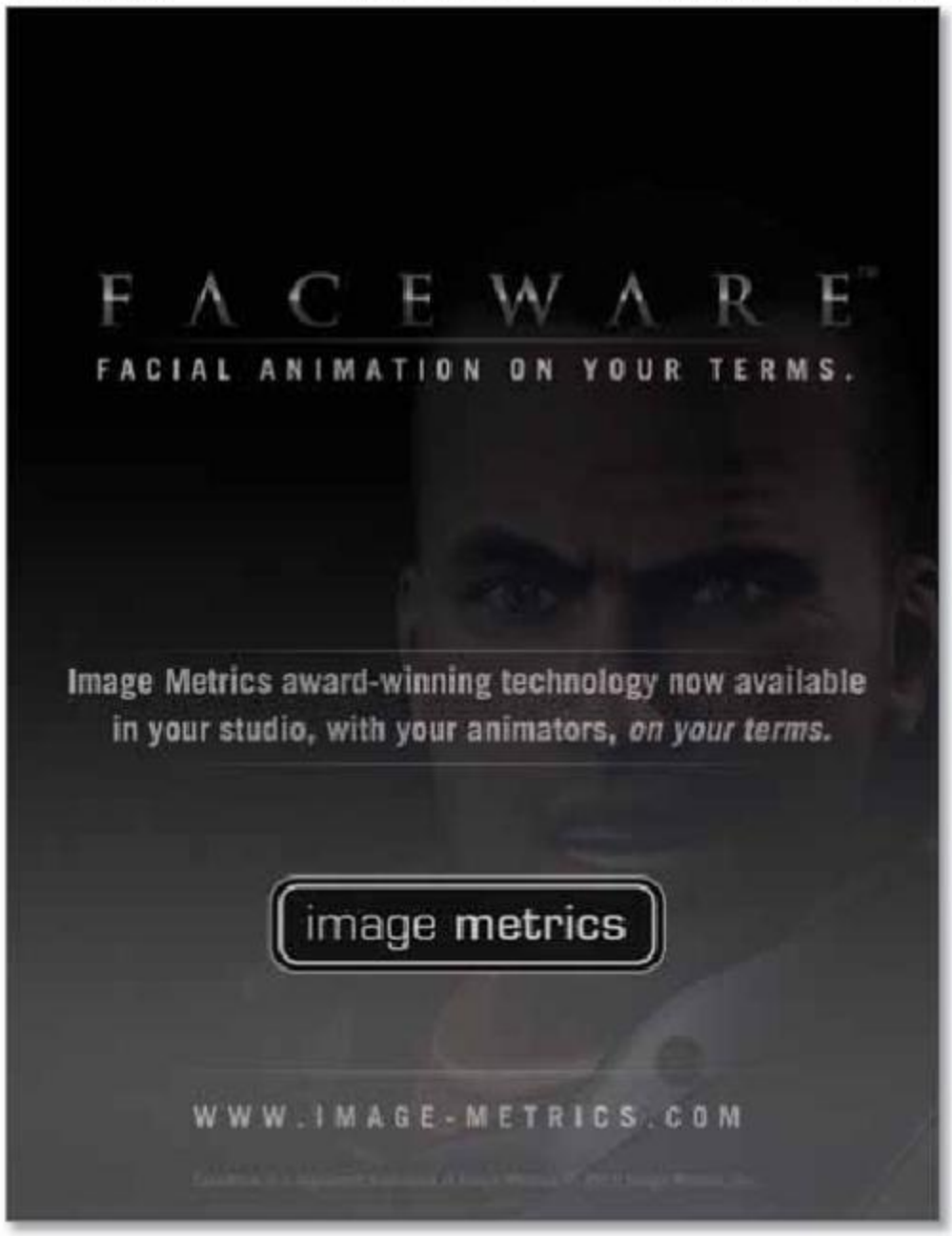
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Training News

Train2Game benchmarked by dev universities

Train2Game's independent development and design courses have been benchmarked against the Qualifications Credit Framework by two universities and TIGA.

The Universities of Bedfordshire and Portsmouth worked with TIGA to compare Train2Game's courses to the guidelines of bodies like Skillset, the Sector Skills Council for Creative Media.

A panel of education experts determined that the courses are equivalent to the final stage of Higher National Diploma Study or the first two years of a Bachelor's Degree.

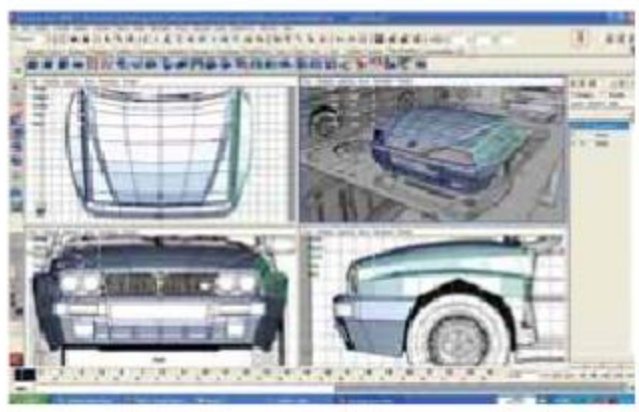
The key findings said that both courses are developed, managed and delivered by people with vast experience in the games industry, including consultation with the wider industry via TIGA members. The panel also said that Train2Game's courses are not only relevant to the games industry but can assist in the employability of students in the sector.

DR Studios course director Tony Bickley of DR Studios said: "We're proud to confirm the benchmarking of Train2Game's courses against recognised industry standards."

"The findings prove that our courses are extremely relevant to the gaming sector and should ensure that Train2Game has full validation in the eyes of students who are considering taking up one of the courses, as well as with the prospective employers of our graduates," he added.

www.train2game.com

Autodesk course offers students six-month free Maya trial



Software group Autodesk is launching a free game development studies programme where any student with a net connection can get involved.

Those with a student email address can sign up to Autodesk's 16-week curriculum, which offers practical training for the entire game development pipeline, from concept art to creating an engine-ready asset.

Users will be able to cut their teeth on a free six-month copy of Maya, as well as a 30-day trial version of Mudbox, the digital sculpting and texture painting software.

An Autodesk spokesperson told *Develop* that any student can take part, though the firm is encouraging universities to incorporate the game design course.

Laguna College of Art & Design's game art department chair, Sandy Appleoff, had praise for Autodesk.

"Autodesk is providing a valuable link between educators and the game industry, and helps make sure that our graduates' qualifications match industry needs.

"Having this masterful curriculum has allowed our students to move faster. By the end of the semester they will have produced game engine-ready assets and have them loaded and functioning in the game engine," she said.

usa.autodesk.com

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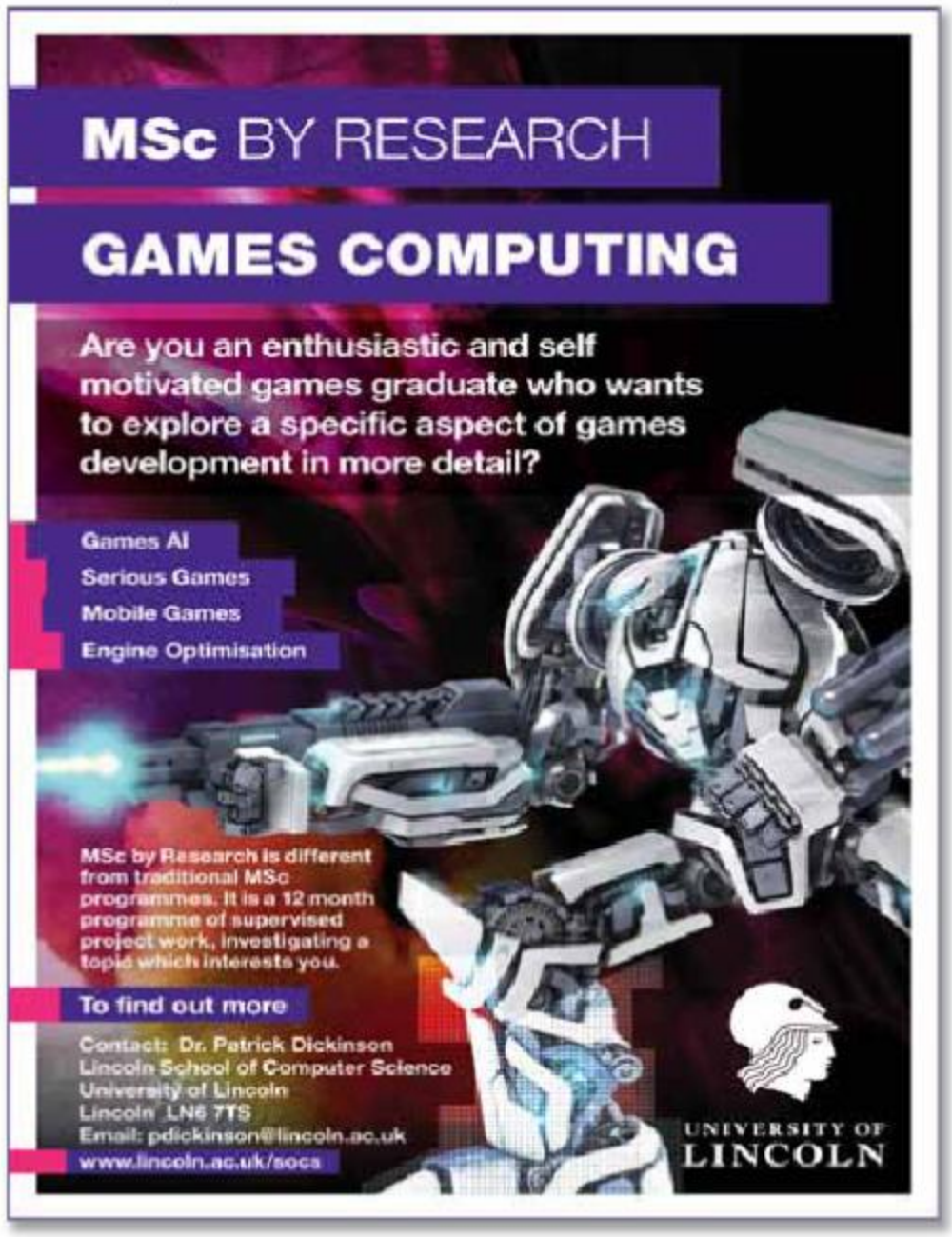
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Jason Avent, Disney Black Rock Studios

The Develop Conference is a double espresso for the soul, and a sensual massage for the mind. Newcomers and veterans alike will find the sessions persuasive and provocative, and are guaranteed to meet interesting new people.
Jonathan Smith, Traveller's Tales

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Following it's hugely successful launch last year, we open again on Tuesday 13 July with Evolve – three tracks dedicated to the cutting edge of game development – new technologies, new markets and new platforms. The main Develop Conference runs on 14 –15 July with speakers from the elite of the international development community presenting across eight tracks. Art, Audio, Business, Coding, Design, Evolve, Production and The Den.

KEYNOTE EVOLVE

Louis Castle, CEO,
Instant Action Inc.

KEYNOTE EVOLVE

David Helgason, CEO,
Unity Technologies

KEYNOTE AUDIO

Adam Levenson, Director,
Central Audio and Talent,
Activision Publishing

Other sessions include:

- **An Overview of the Stereo 3D Marketplace**
  Susan Tunstall and Jon Lee, BTV
- **The Reality of Making Money from Episodic Games**
  Andrew Eades, Relentless Software
- **The Lowdown on Downloadable Content**
  Chris Bruce, SingStar, SCEE
- **Managing Risk from a Developer's Perspective**
  John Dennis, Team 17
- **Productivity: Make Life Easier for Your Team**
  Jason Avent, Disney Black Rock Studio

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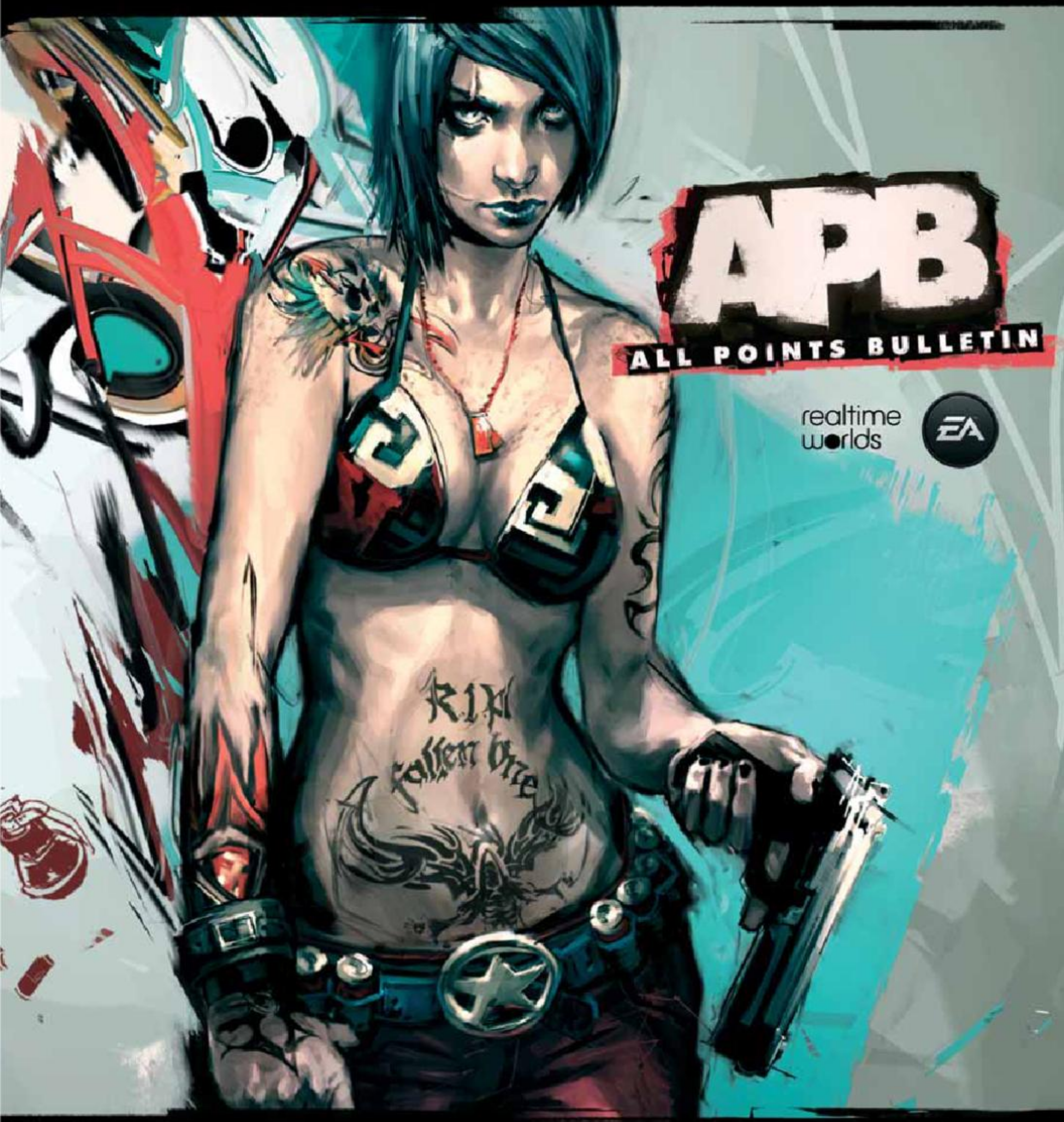

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